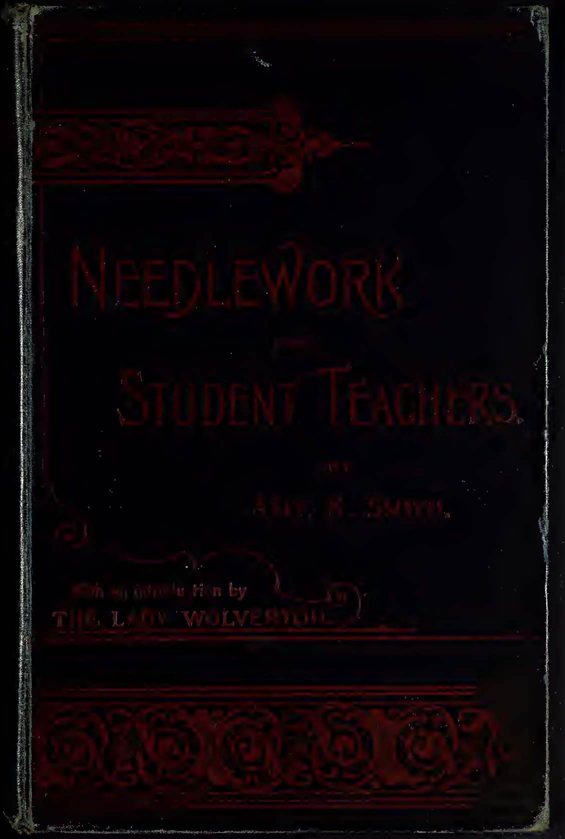

NEEDLEWORK

FOR

STUDENT TEACHERS

BY

AMY K. SMITH.

With an introduction by

THE LADY WOLVERTON.

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April 189

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NEEDLEWORK

— FOR —

STUDENT TEACHERS.

Intended for the use of Pupil Teachers, Scholarship
Candidates and Certificate Students
(1st and 2nd year).

BY

AMY K. SMITH,

Diplomée of the London Institute for the Advancement of Plain Needlework;
Specialist under the London School Board; and
Day Training College, Moorfields, E.C.
Examiner to the City and Guilds of London Institute.

WITH AN INTRODUCTION BY
THE LADY WOLVERTON,
Founder of the Needlework Guild.

FOURTH EDITION.

CITY OF LONDON BOOK DEPÔT,
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INTRODUCTION.

NO one can rejoice more than I do over the change that has taken place in the treatment of girls as regards their education. Under the old-fashioned system of what can only be called "smattering," their individuality was ignored; their powers, if any, were disregarded; one monotonous "table of lessons" hung in every schoolroom—one code of rules sufficed for all. Ear or no ear, a girl must learn music; eye or no eye, drawing was to be taught her; two or three languages were to be a *sine quâ non*, whether she had an aptitude for them or not. What was the consequence? The mind was left perfectly untrained and uncultured. The system gave a sort of shallow smartness to those quick at apprehending—a most useless quality when it is all a girl possesses. In fact, to all intents and purposes, woman was considered to have no mind worth thinking of; to be incapable of reasoning; her powers were surface powers, requiring only surface treatment.

This wretched system has been superseded, perhaps hardly universally yet, but in a great measure, by one of a far more serious character. Now-a-days woman is allowed to possess a mind, one, too, acknowledged to be equally capable of development with man's; she reads, reads wisely and well; she thinks, she gives out her thoughts. "Why do men study so much better than women?" I once asked. "Because a man always reads with the object of giving out again; he, therefore, is obliged to read carefully, to take in the best parts of books; all parts are alike to a woman; nothing is demanded of her in the way of text as to what she has read, or what it has produced in her mind."

Now this, too, has changed; women do read to give out again; they, too, have their examinations, they have their tests as to what is in them; in fact, they are now *educated* according to the proper meaning of the word, not merely "made to learn." Henceforth they will be man's companion in life and work; they will have serious subjects in common. No longer in society will men only treat women to frivolous outside talk; they will be able to discuss all interesting points together.

So far it is very good; but there is always a fear lest change should imply destruction, or at any rate substitution; and there are some things in the old-fashioned system that it would be worse than folly to set aside. One of these, to my mind the most beautiful feminine occupation, is needlework. I hold that every woman in every class should be a good worker in this sense of the word. I am, therefore, very glad to be allowed to say my little say on this subject as an introduction to this most valuable addition to our plain needlework literature. It deals with the work, common, possible, essential to us all. No woman's education is complete without it. I don't care how fine a scholar she is, how good a musician, how grand an artist, if she cannot cut out and make her own, her husband's, or her children's clothes, if required of her—and a time may come to require it in any of us—I do not call her a *perfectly educated* woman.

Needlework, like all knowledge, has to be learnt; it does not come by instinct, it must be taught early, it must be practised long before perfection is attained; and only when perfect does it, or anything, give satisfaction. Woman, being, above all things, a home creature, should aim at all homely qualities. Needlework brings many; it encourages neatness, cleanliness, accuracy. Messy work, taken up in hurried moments, left lying about day after day, is a sorry sight. Work to be good—always aim at the best—must be neat, clean, and accurate; and work to be such, means a worker to match. Work, too, encourages quiet—such an essential for comfort in home life. We sit down to work; we think when we work—it is a lovely opportunity for reflection, for taking a subject and thinking it out—it tames boisterous natures. Interest the roughest girl in a bit of needlework, and she will sit quiet for hours.

I discovered another advantage in it when I lived in a far-off country. In our village there was quite a brigade of old women, eight or nine of them, all more or less afflicted with rheumatism. I used to go and sit with them; they seldom were doing anything but sitting over a poor fire, talking of old days, which, of course, seemed to them at that distance so much brighter than the present. Something to do was really what they wanted; if their fingers were busy their hearts would rest more. So I started a little society for them. Once a week they came up to the house—a pretty short walk across the park, which they liked; it was a change to come and sit with me, instead of my sitting with them, so we dawdled rather over our business. It consisted merely in giving out one cut-out article of clothing to be brought back made the next week, and another taken away. "Well, Rebecca," I said one day, "this is a success, isn't it?" "Yes, my lady," she answered, "it do save us in shoe leather, for we sit so still a-doing it." I had never thought of this, but I can well believe the truth of it; we can never fathom all the good that can come of anything with "good" as its object any more than we can say how many circles will be made by one stone thrown into a pool.

I have been allowed a glance at some of the MS. of this book. It seems most carefully and clearly written, all the directions are simple and definite. The diagrams are most fascinating, their exquisite accuracy is a lesson in itself, and there ought to be no difficulty in attaining perfection in beautiful needlework, if only the letterpress is attentively read and the diagrams carefully studied. To begin at the beginning is the best in all things, so I advise everyone who is fortunate enough to get a copy of this book, to read from the first word to the last; if it does not make them good, careful workers, turning out articles that will give pleasure to look at, it will not be the fault of the authoress. I believe that there are a good many lessons to be learnt from it, besides the obvious one of how to make the best use of the needle, thread, and thimble.

I can only hope it will meet with the success it deserves.

GIANA. M. WOLVERTON.

PREFACE.

THIS little manual, as its title implies, is primarily written with the view of assisting students in their preparation for the Government examination in needlework, whether as a pupil-teacher, scholarship candidate, student for certificate (1st or 2nd year), or others interested in this important sphere of education.

An endeavour has been made to treat the subject in detail, as will be seen by the 47 articles bearing upon almost every branch of plain needlework. Many of the chapters contain sufficient matter to afford practice for several lessons.

In order to assist those students who have not the advantage of either class or private teaching, the text has been illustrated with diagrams, which will serve to remove any doubts which may exist as to the manner of working the various specimens.

The aim has been to give the subject a broad scope, and to allow students as much freedom in method as is consistent with common sense; although rules for certain stitches and processes of work are often quoted, which were, perhaps, recognised by our grandmothers, a strict adherence to the letterpress is not absolutely essential, nor always expedient, but each student should exercise her discretion according to the work in hand, and the circumstances and taste which attend it.

Hints are given in the course of the notes on class management in schools, but a special feature has not been made of this, as being of such importance, it almost seems to need a treatise of its own, and so many manuals are at present in circulation which have dealt with the subject so ably and exhaustively.

The furtherance of the student's own knowledge has been kept to the front, with the hope that each one may be able to show her efficiency when put to the test of examination. With this practical knowledge as a foundation, the student will have awakened sufficient interest in her work, to engraft to these notes any suggestions and hints as to methods of teaching, which will naturally present themselves to a painstaking teacher who has her pupils' welfare at heart, and her own reputation to gain, by developing the skill and intelligence of the class entrusted to her care.

Each portion of the Government syllabus has been dealt with, and for the sake of convenience the matter is divided into three parts, viz.,—I. Stitches used in making garments. II. Patching. III. Darning. Part III. is comprehensive, and contains information upon practical home mending, a branch of work to which young people are often indifferent, let us hope from want of the necessary time, and not the lack of inclination or skill. Everyone must allow that such a womanly occupation as needlework can never have too high a value set upon it. In after years, when 'ologies sink into oblivion, there still remains the fact to face one—that men, women, and children must be clothed—these clothes repaired when worn—and the household linen carefully mended; perhaps it is not till then that a thrifty wife, mother, or sister, fully appreciates the care with which her education in this important subject has been tended; but this is moralising, and the matter of examination claims attention.

The appendix includes all information in the Education Code relative to needlework, and the questions and exercises which have been set for several years at the Government examinations for pupil-teachers, candidates for admission to training colleges, and certificate students. These have been carefully culled, and are up to date, as this feature, at certain times of the year, will probably claim more than an ordinary share of attention.

No part of the book treats of either cutting-out or knitting. The former branch of work is admirably dealt with in two publications of Messrs. Longmans & Co., viz.: "Mrs. Grenfell's

Diagrams for Cutting Out Underlinen," and Miss Heath's "Pattern-making by Paper Folding." Manuals on knitting are legion; Miss Warleigh's Knitting Books contain much useful information on school work, and Messrs. Weldon's "Practical Needlework Series," (price 2d.) will be found invaluable, as these papers describe almost every article it is possible to make by knitting.

In the present work, each stitch has been arranged under progressive headings, forming, as it were, matter for "Notes of Lessons." This arrangement may, perhaps, synthetically be open to criticism; but experience has shown that a definite order in work is the secret of success, and as many students, especially in country districts, not having the privilege of class tuition, but feeling the need of assistance, seek lessons by correspondence, this arrangement of the text may prove helpful, and if this little book succeeds but in this respect, it will have fulfilled the purposes for which it was written.

April, 1892. A. K. S.

PREFACE TO SECOND EDITION.

(FIFTH TO EIGHTH THOUSAND.)

The first edition of this book has been exhausted in rather less than a year.

I take this opportunity of tendering my heartiest thanks to those who have so kindly appreciated my small endeavours to assist students with hints on needlework, and to the Press and Specialists for their much-valued criticisms.

During the year this text book has been used by about 800 teachers preparing for the scholarship and certificate examinations in connection with Professor Cusack's correspondence classes. The correction of the work has brought to my notice a few instances in which either the letterpress or diagrams have not been clearly understood by the student, and in this edition I have made the slight alterations necessary to render the text even more explicit, and have put italicised notes under a few diagrams.

A chapter has been added on different methods of making openings in garments, and all recent examination tests and Code requirements brought up to date.

Several well-known firms have been good enough to contribute advertisements of their specialities. Reference to these notices will be found helpful to purchasers, and will ensure the use of a suitable article for school and home purposes.

Should any difficulty arise in working any of the processes of work described in this book, a letter addressed to me at the Publishing Depôt, will always receive prompt attention.

With repeated thanks for past patronage, I beg to assure student teachers, that in the matter of needlework, their interests in the future (as they have done in the past) will engage my most careful thought.

March, 1893. A. K. S.

PREFACE TO THIRD EDITION.

(Ninth to Fourteenth Thousand.)

I again offer my sincerest thanks to all who so kindly appreciate my efforts to be helpful to teachers.

This Edition has been brought up to date, and carefully revised to meet present Code requirements, while the paging remains the same.

November, 1894. A. K. S.

PREFACE TO FOURTH EDITION.

(Fifteenth to Twentieth Thousand.)

It is very gratifying to know that this book still continues to be a Standard work of reference, and that the increased circulation necessitates the issue of another edition.

A chapter on "Strengthening and Looped Tapes" has been added, and the matter relating to "Selvedge and Weft of material" (page 7), considerably supplemented by very full notes, and every revision has been given which is needed to keep the book up to Code requirements.

November, 1896. A. K. S.

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PART I.

Stitches and Processes Used in the Making of Garments.

PATENTED 1886. **PATENTED 1886.**

"THE PARAGON"

Needlework Demonstration Apparatus,

(LAMBERT'S PATENT.)

AS SUPPLIED TO THE SCHOOL BOARDS FOR

London, Birmingham, Leicester, Nottingham, Darlington, Glasgow, Dundee, &c., &c., &c.,

AND THE FOLLOWING TRAINING COLLEGES—

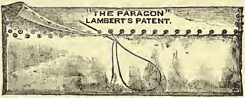
Stockwell, Saffron Walden, Chichester, Warrington, Edinburgh, Whitelands, Norwich, Salisbury, Darlington, Aberdeen F.C., Wandsworth, Brighton, Oxford, Ripon, Aberdeen C.S.

This Apparatus is so prepared as to teach by demonstration all the stitches in plain needlework, including darning; also folding, tacking, commencing, joining the cotton, and finishing off the pieces as required by the Code, and is approved of by the Hon. Mrs. Colborne, Directress of Needlework to the Educational Department.

Each piece of the Apparatus represents exactly the material which the children have to work upon, and is of such a size that a large number of children can be taught as quickly and as effectually as one, thereby saving much time and labour, and securing vastly superior results.

To hold the Demonstration materials in full view of the class during the lesson, a frame is used, furnished with a series of hooks, so arranged that each of the pieces can be quickly and easily attached in whatever position it is required to show the working of the various parts.

Sketch of Hemming. Size, 18 inches.



18 inches.

REDUCED NETT LIST.

	s.	d.		s.	d.
1 Hemming	1	0	14 Canvas	2	0
2 Seaming and Felling	1	6	15*Darning thin place on Stocking Web	2	6
3 Stitching and Putting on Tape ...	2	6	16*Darning hole on Stocking Web ..	3	0
4 Flannel Patch	3	6	17*Grafting and Stocking Web do.	3	0
5 Button-hole & Sewing on Button	3	6	18 Knitting Needles and Cord ...	1	0
6 Gathering and Setting in Gathers	3	0	19*Frame, hard wood	4	6
7 Gusset	3	0	20 Stand, 38 in. high	6	6
8 Cotton Patch	3	6	21 Strong stained Wooden Box for do.	3	6
9 Tucks	2	0	22 Running and Felling	1	6
10 Whipping and Putting on Frill ...	2	0	23 Seaming, Felling & Tacking Hem	3	6
11 Print Patch	3	6	24 Kindergarten Sewing	3	6
12 Diagonal Cut (Darning)	2	6	25 The Complete Set of 24 pieces ...	67	6
13 Hedge Tear (Darning)	2	6			

Each piece is sent out complete, with special needle and cord, one or more pieces being supplied as required. All the pieces except those marked thus (*) can be used without the frame.

When ordering please quote numbers only.

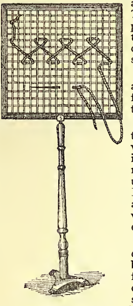
COX & CO., "Sole London Agents," & Wholesale Depot,

99 & 101, NEW OXFORD STREET, LONDON.

Also Simple Cutting Out. Part I.—Underclothing. Part II.—Baby Linen, Each 1/-

APPARATUS FOR TEACHING PURPOSES.

IT is now generally agreed that the most successful system of teaching needlework is that known as the "Demonstration Method." By this plan large numbers can be instructed simultaneously, while it is as easy to teach 80 pupils as one, providing a teacher is master of her subject, and has that essential qualification —confidence. Each member of the class has the privilege of seeing the principles of the work she may have in hand, illustrated on a large scale, by means of some ready apparatus.



The initiatory aid to class teaching is a demonstration frame. (See illustration.) This consists of a thin outline of wood, pierced with holes, through which narrow tape is stretched from top to bottom, and crossed at right angles, the places of intersection being secured by firm stitching.

The frame (with special whalebone needle and cord) can be bought at every school furnishers for 5s. 6d.; with a stand to hold the frame steady while demonstrating, 13s.

A substitute can be easily constructed by the use of an old slate or picture frame, to which the tapes can be attached. A packing needle and coloured cord will then make all complete. It is not advisable to use the frame for teaching below Standard III.; but for this class it possesses a special advantage, as more than three parts of the work required in this Standard can be demonstrated by this apparatus.

All stitches worked upon the flat are easily shown, viz., stitching, herring-boning, buttonholing, gathering, running, marking, feather-stitching, knotting; also darning on canvas. Those stitches requiring a raised surface, as sewing, setting-in, whipping, do not admit of an exact illustration, although the direction of the stitch can be shown.

In several of the chapters of this book reference is made to the appearance of stitches as worked upon canvas, which is merely a miniature demonstration frame, or, to express it more accurately, the tape threads of the frame represent on a enlarged scale the threads of canvas and of material.

An improvement on the above is the "Stockwell Demonstration Frame" (Hull's patent). The frame is formed so that it can be used either open or folded. A hinge allows the upper part to fall down, so that the stitches worked on a folded edge can be clearly shown. Detached strips of taping are also given, which is a decided advantage in teaching hemming, stitching, and herringboning as for the corners of a patch, and even a sew and fell seam.

"The box in which the apparatus is packed serves the purpose of a stand, besides keeping the frame, &c., clean and free from injury."

The price of the whole is 12s. Its compactness and usefulness must commend itself to all teachers of needlework.

The frame can be obtained from Messrs. R. A. H. Toms and Co., 42, Borough Road, S.E. (See advertisement, page 231.)

The "Paragon" apparatus (Lambert's patent) is another excellent means of demonstrating on a large scale, not only the actual stitches in use, but a perfect specimen of work in its entirety. Each piece of the apparatus represents material, the stitches used in making up being worked through carefully adjusted eyelet holes. The complete set of specimens illustrates every portion of work required in Schedule III. Single specimens may be bought.

A price list with diagrams can be obtained from Messrs. Cox and Co., 99 and 101, New Oxford Street, W.C. (See advertisements, pages xvi. and 120.)

A chequered blackboard is a most useful addition to needlework apparatus. A small size (36 by 30 ins.) will cost about 11s. or 12s. The whole surface of the board should be divided into inch squares. To facilitate counting it is advisable to have every ¼ yd. coloured differently. Any ordinary board can be made use of by a teacher who does not mind a little trouble. A small tin of enamel will be sufficient to chequer a board of the size mentioned above. The inches should first be faintly marked, and then carefully painted. Portable black canvas on rollers, divided similarly to the boards, are very convenient for teaching purposes. (See advertisement page 232.)

The "Needlework Demonstration Sheets," published by Messrs. Griffith and Farran, show the formation of all stitches in elementary needlework. The size of the sheets is 30 by 22 ins. Price 9d. each; or, mounted on rollers, and varnished, 2s. 6d.

These sheets were prepared by the pioneer of the "demonstration" system, and for this cause alone deserve a place on every school wall. The directions for working the various stitches are most explicit, and the diagrams leave nothing to desire.

With all the above-mentioned apparatus from which to make a selection, no teacher can say that the subject of needlework has not been catered for exhaustively by those who have proved by experience, that it is only by method and system, that a maximum work can be obtained by a minimum of labour.

I. HINTS TO STUDENTS.

General remarks.—The notes contained in this chapter are intended for those students who are practising with an examination in view, and although each should work with a higher motive than that of inspection, still one cannot help giving the matter just a thought now and again.

Needlework is an *art*, and, as such, of necessity needs a proportionately greater amount of *time* spent upon it than a subject which requires mental attention alone; for, if intelligently taught and practised, needlework calls into play both mind and fingers. For the sake of comparison we may view work under two phases—specimen and practical household. The former should be done to the *very best* of the student's ability, and looked upon as a pattern for others to imitate; necessarily, it is rather a slow process, as *quality* is the essential. The latter kind of work, although exactly the same in principle, invariably means *quantity* as the first consideration, hence the reason for making this slight distinction.

Needlework is one of the failing subjects, and it is a fact, not generally known, that it secures as many marks at an examination as arithmetic and school management. It is impossible to produce a satisfactory result, unless *steady* and *regular* practice is maintained. *Few* people are perfect needlewomen born, but *many* have taste and skill, which with cultivation can be developed to almost any extent, by the exercise of patience, perseverance and a little exertion—three pre-eminent virtues in any occupation, or in any sphere of life.

Many young teachers fail to produce their best when required, not so much from a lack of knowledge, but from a want of method of showing the ability they possess to the best advantage. It is with the intention of helping to overcome this obstacle that the following chapters are written.

It must be borne in mind that quantity of work, as well as quality, is an essential at an examination, and upon the right application of these two features each candidate's merits are assessed.

SYLLABUS OF WORK.

PUPIL TEACHERS.

The requirements for each year will be found in the Appendix.

An arrangement of the work as regards time is given below; the circumstances may alter this, and it is merely offered as a suggestion:

Knitting.—Begin this at the commencement of the course, and have a bag or basket in which to keep the work. *One* sock or stocking only is required to be shown, but every worker must allow that *one* is useless, and in how many cases has it been known to remain "single"? If the second one gets done it always seems so wearisome; therefore, to keep up the interest, be advised to *commence the pair*, and work at them alternately, the knitting will necessarily have a more even tension, hence more like a pair, and, as regards this feature, the triumph will be much greater when both are done. Undertake to do a certain amount each week, and a little practice will enable you to use the mind at the same time. (The student should thoughtfully read the introductory chapter to this little book, which speaks so feelingly upon this point.) When the knitting is complete, it should be folded as manufactured hose would be, and pressed under a heavy weight, to ensure flatness, and a good general appearance.

In the present code very little knitting is required from pupil teachers (see syllabus). The above hints are, however, left as useful suggestions to knitters in general.

Garment.—The garment for inspection had better be started next. It is folly to leave this too late, as hurry means anxiety, worry, and, worse than all, a badly made garment perhaps. Too much stress cannot be laid upon the need of cleanliness and neatness, as the garment is to be "a model."

Always be provided with a clean apron, and loose sleeves just to slip over the dress, so that the arms of the frock may not touch the work. A clean wrapper in which to keep the garment is indispensable. Have to hand scissors, cottons, inch tape, pins, needles, and thimble, so that when the hands are thoroughly washed nothing needs to be touched but the work. Warm hands are often a great source of trouble; washing in hot water is a slight preventive, dusting the hands with cornflour, bran, or powdered alum or starch is recommended, but this complaint is often constitutional, and can rarely be got rid of till the physical vigour is improved, and the system assumes a better tone.

If possible sew by daylight; this cannot always be done at certain times of the year, but use discretion and choose a convenient opportunity. Work by lamplight in preference to gas, the former is much less wearying to the eyes, especially if the light can be thrown down upon work.

Specimens, diagrams and patterns.—These can be done next, and then each article should be neatly labelled with the worker's "Name—Age—Year—School."

The few months before examination should be devoted to practising the various specimens, which may be asked for on the examination day, and which are required to be done in a given time, viz., one hour. Just double the number of marks are allotted to this test than to the year's work, but if it be considered that while the garment and specimens have been in working, practice has been afforded which may help to earn the higher mark, then this seems more reasonable.

Marks are awarded as below:

Garment shown	30 marks.
Test in the presence of the Inspector	60 ,,

SCHOLARSHIP.

This examination is a recapitulation of work required during a pupil teacher's apprenticeship. Therefore all stitches mentioned in Schedule III., or any of the processes in plain needlework, illustrating portions of garments, may be asked for. Two hours is the time allowed for the practical work, viz., cutting out and sewing. A special syllabus is now issued each year.

No garment is required to be shown, but the work prescribed in the Scholarship syllabus must be presented to H.M.I. at his visit to the school in which the candidate is engaged.

Material is supplied by the Education Department for the use of candidates attending the scholarship examination. Each student should provide herself with cottons, needles, &c.

CERTIFICATE (1st and 2nd YEAR).

The requirements for both of these examinations are published about July each year, and can be obtained direct from the Education Department, or from the editor of any of the educational papers. Although some of the work is the same as for Scholarship, a much higher standard of efficiency is expected.

Two hours is the time allowed for the test work.

Each student in training is also required to give a lesson in the presence of the Directress of Needlework at her annual visit to the College.

MATERIALS NECESSARY FOR PRACTICE WORK.

Calico, flannel, print, muslin, stocking-web, coarse linen, and canvas, are the fabrics usually employed for illustrating the various processes used in needlework. As students are often in doubt as to material suitable for their use, the following may prove helpful:—

Calico.—A soft make with even threads should be chosen. Any of Horrocks' or Crewdson's calicoes or longcloths are specially recommended both for garments and specimen work. Certain numbers and letters indicate the quality and price. (See advertisement, page 221).

A1 and B1 are suitable for practice purposes. H, M^2, and MT for garments.

The "Crewdson" makes are stouter calicoes, suitable for coarser work.

The above calicoes are undoubtedly the best for school and home use.

Flannel.—Flannel varies in price from 8¾d. to 2s. 6d. per yard, or more. There are several kinds—Welsh, Saxony, Yorkshire, Lancashire, &c.

Welsh.—For wear, perhaps this is unequalled. It is coarse and rough-looking, but very durable. It is suitable for petticoats. The selvedge or "list" is of a dark grey colour.

Saxony.—This is a softer and lighter make, with a pinkish edge. It is used for babies' flannels.

Yorkshire.—This is creamy white in colour, with a very narrow selvedge. The threads of this make are very clear and distinct. It shows up the work to good effect.

Lancashire, as the name implies, is a mixture of cotton and wool. It is similar in colour to Welsh, but with a smoother appearance and more even threads.

A cosy cotton flannel, a speciality of Mr. C. Williamson's, 91, Edgware Road, London, W., has much to recommend it for every purpose. A post card will bring a price list, which abounds with every variety of article for household use.

Prints.—Hoyle's are the best make. Choose one with as little dress as possible. For a patch, a pattern needing a little matching should be selected. Zephyrs are also recommended for frocks. Prices vary from about 5d. to 1s. a yard.

Muslin.—Cambric, nainsook and mull muslin are suitable for frocks and pinafores. Embroidery cambric is over 40 inches wide. A good make will cost from 9d. to 1s. a yard.

Stocking-web for darning purposes. Three sizes can be bought —fine, medium, coarse. Web is woven in a circular strip. It costs about 4d. or 4½d. a yard. Medium is recommended.

Linen for marking and darning. Various materials from a common kitchen dowlas at 3¾d. to Saxony cloth at 11d., are sold for this purpose. Prominent and even threads are necessary for practice. Messrs. Moffat and Paige, 28, Warwick Lane, E.C., sell a marking cloth at 4¾d. a yard, which is admirably suitable for exercises in marking and darning.

Messrs. Cox and Co., 99 and 101, New Oxford Street, W.C., also keep a large variety of cloths for darning purposes. The Lincoln cloth is specially recommended.

Either of the above firms will send price lists. (See advertisements.)

Canvas.—*Java* is a soft, coarse kind, used for illustrating the stitches used in plain needlework. It costs about 1s. a yard.

Single thread, or plain stiff canvas is recommended for school purposes. Cost is about 8d. a yard. Never use "Penelope or Berlin" canvas, unless for fancy work.

ACCESSORIES.

Cottons.— It is advisable to use colored sewing cotton for practice work, as the stitches are shown to better effect; hence it is a proper schooling towards exellence. The following grades are generally adopted by those who have had experience in systemizing —black, red, blue or blue-green, pink, and white.

No. 50 (coloured) is the finest in ordinary use. Finer numbers are only made to special order. Ermen and Roby make a speciality of coloured cottons for school use, as supplied to the London, Manchester, and other School Boards.

The advertisement, on page 224, gives a detailed description of special cottons. The embroidery cotton, 1d. a skein, should be used for darning on cotton stocking-web, as it answers the purpose better than Angola mending.

Crochet cotton, Nos. 16, 18, and 20, are recommended for ordinary cloths.

Coats', Clark's, and Kerr's are well known and good makers.

Flourishing or flax thread is used for darning on linen. Messrs. W. and J. Knox's thread is especially adapted for darning purposes. Coloured thread is recommended for school use, and can be dyed any shade and size to special order. (See advertisement, page 225.)

Needles.—Abel Morrall, Thomas Harper and Henry Milward's needles may be relied upon. They are well known to be the best makers. Betweens sewing needles are suitable for school use. Nos. 7, 8, and 9, are convenient sizes. Nos. 5, 6 and 7 for darning. Wool and crewel needles are often useful in plain work. (See advertisement, page 229.)

Scissors.—Cutting out—medium size—buttonhole.

Pins.—Lillikins are preferred for specimen work, as the mark left is hardly noticeable. Short whites are also necessary.

Knitting pins.—Nos. 14, 15, and 16, are sizes in ordinary use.

Buttons.—Unpierced, and the best quality linen, are cheapest in the end.

Flannel binding.—This costs from ¾d. to 2d. a yard, according to width and quality.

Tapes of various widths.

Inchtape.

Thimble.—For strength and durability the "Dorcas" thimble is unequalled. It is made in three parts, the inner and outer being silver and the intermediate steel. It is thoroughly recommended. Its cost is trifling compared with its comfort and strength. (See advertisement, page 232.)

Wool.—So many kinds are in common use with which all workers are familiar. Fingering is world-renowned, and Alloa yarn, a speciality of Messrs. J. Paton & Son, (see page 227) is admirably suited for sock and stocking knitting. Messrs. Faudel Phillips have an endless variety of wools and yarns, and by reference to their list on page 228, a suitable material can be had for every kind of knitting.

PREPARATION OF MATERIAL FOR CUTTING-OUT.

One of the first points to be mastered in teaching cutting-out is what is known as the "way of the stuff." Too much importance cannot be placed upon this, as in criticising garments it ranks before the stitches used in the making up, and quite 25 per cent. marks would be deducted at an examination for an error in distinguishing the proper way of the stuff to cut a garment or a section of a garment. All woven material consists of two sets of threads, viz., warp or "*selvedge*" and "*weft*" or woof threads (the italicised words are the ones in general use, and should be familiar terms with every seamstress).

Selvedge threads are the longitudinal threads which run from end to end of a fabric, and are tightly wound on rollers in the loom, and kept at regularly spaced distances by the healds and reed, so that the warp threads are subjected to the utmost tension. The *weft* thread is wound on a bobbin, which is enclosed in a shuttle, and by the mechanical action of the arms of the loom, passes backwards and forwards alternately over and under the warp threads, according to the pattern to be woven. It is the turning of the "weft" thread in the process of weaving which forms the selvedge. If the weft threads were sufficiently strong (such is rarely the case), they might be unravelled for hundreds of yards. The excellence of the make of material is often shown by the even quality of the selvedge. Silks frequently have coloured selvedges. In flannels it is pink, grey, or dark blue, and varies in width.

Selvedge is sometimes written "selvage." The former is the more correct spelling. The word really means self-edge, *i.e.*, its own edge, which forms a border to the material and extends throughout its length.

The following are a few ways of distinguishing the selvedge:—

1. Take the edge of the material between the thumb and finger of the right hand, and at a distance of a few inches away hold the material with the left thumb and finger. Gently pull the hands in opposite directions, and if selvedge way, the material will resist the pulling, as the selvedge threads are strong and firm. *Weft* threads will give or stretch when pulled. Some materials will stretch as much as an inch or two in a yard. It is not wise to stretch the material to this extent, as it will be pulled out of shape for working purposes.
2. The selvedge threads are often coarser and more closely twisted than the weft, and in some materials stand out more prominently.
3. The selvedge threads are straight, whereas the weft threads seem to have an uneven, slightly wavy, crinkled appearance, caused by being passed over and under the warp in the process of manufacture. The weft threads are also much looser.
4. There is sometimes a difference in the sound if the material be pulled. The warp threads produce a sharp shrill sound; the weft threads are duller and heavier. This difference is not noticeable in common calicoes.
5. When material is torn the frayings at the selvedge edge are often short and close; at the weft edge the fringe is longer and more irregular in length.
6. Selvedge threads will not break unless pulled tightly, and a long length of selvedge thread can often be withdrawn, but the weft threads have a tendency to break every few inches, even with the slightest strain.

When measuring length of material, the inch tape is applied to the selvedge way first, and to the weft edge afterwards, so that in stating the dimensions of a piece of material (*i.e.*, the length and the width) the *selvedge is always given first*, thus:—36 inches selvedge way and 18 inches weft way, would be read as—36 by 18, similarly, 2 inches selvedge way and 7 inches weft, would be read as—2 by 7. It is most important that this be understood.

Selvedge way material is sometimes spoken of as "the right way of the stuff," and the weft way as "the wrong way." This is not a correct expression, as for some parts of a garment the weft way has to be cut and worked, and therefore the weft way is the "right way" for the purpose.

Note.—All garments, with the exception of a few severe fashions in dresses, are made up so that the *selvedge threads of the material run downwards*, that is from neck to feet, and from shoulder to wrist. This is important, as *portions* of garments are often asked for at examinations, and the right way of material upon which to represent the part must be the first consideration.

All bands, whether for neck, waist, wrist, or knee, are made with the selvedge running *round*, that is at right angles to the other parts of the garments. Bands are made *selvedge way* in order that they may not stretch or split, which they would do if made with the weft way.

A yoke, which is merely a shaped band, follows the same rule, and the selvedge threads are usually placed across the back—exceptions are sometimes made with regard to shirt yokes and dresses.

It makes a great difference both in *appearance* and *wear* of a garment if it be cut the proper way of the stuff, and it is impossible to calculate the necessary quantity of material required for a garment, without taking into consideration the weft width.

Cutting-Out paper is called "lined or extension" paper. It is whitey brown, and has distinguishing red lines, ¼ inch apart, *which indicate the selvedge way of the material.* Every quarter yard is often marked with a different coloured line. Each whole sheet measures 45 inches by 36. It costs about 1s. a quire. It is tough, and so will admit of tacking up without breaking. It would be extravagant to use this paper for practice purposes in schools, as ordinary newspaper will answer for children's cutting out, unless for a special use. Tissue paper is too flimsy to be of much value, besides, the size of the sheets is too small to be of any good but for the smallest garments.

Sectional paper is used for drawing diagrams. The paper is divided into small sections or squares either ¼ or ⅛ inch apart. Each small square represents *one* inch of the full-size pattern, and the drawing is said to be ¼-or-⅛ scale. (The former is generally asked for at examinations.)

Scale means drawing in a fixed proportion to the actual size, by using one or more squares as the unit of measurement, and chequered paper is used to save unnecessary measuring.

The advantage of scale drawing is that it economises space, and enables a large garment to be represented in a relatively small and convenient manner, so that measurements can be easily seen.

It is customary to letter (A, B, C, D, etc.) certain portions of a drawing (particularly corners, angles and ends of lines) in order that each section of a diagram may be readily referred to.

The cost of sectional paper is 1s. a quire. The size of each sheet is 30 in. by 20 in., and every inch is ruled in darker ink.

Many school publishers stock small sectional exercise books, which are most useful.

FINAL HINTS BEFORE AN EXAMINATION.

Provide yourself with all implements and materials necessary.

Carefully read through the test required, and at once plan out the allotted time, so that when the work is collected no portion of what was asked for remains unattempted; this is important, as a certain number of marks is given for each portion of work, and if a candidate neglect any part, marks cannot be granted for it, and so she becomes the sufferer by the omission. A few inches of any stitch are quite sufficient to obtain full marks, if well done.

Any cutting-out should always be dealt with first. If you are not familiar with the garment, cut what looks proportionate to the eye, rather than leave the work unattempted.

Next undertake any plain needlework, portioning the time for each piece required; say 5 min. for hemming; 10 min. seaming; 10 min. buttonhole; 5 min. tape; and so on. Be very careful to fasten off all ends neatly, remembering that marks are given for general finish.

Devote the remaining time to the tacking up of the pattern, if asked for—write any directions on the paper pattern as to making up, which you would recommend, so that the examiner may credit you with a common-sense arrangement of your work.

Should a diagram be needed, be sure it is *accurate* and *neat*, both of which are important features.

If the hints given throughout this and the following chapters are borne carefully in mind, and accepted in the kindly spirit with which they are given, failure or even a low mark, at any needlework examination, will be an unknown occurrence.

II. NEEDLEWORK DRILLS.

I. Introduction.—It is only by reducing work to method and system, that teachers can cope with the difficulties that beset the path of instructing the young in plain needlework. Graduated teaching is most essential in every subject, but especially in an art which requires so much deftness, finger skill, and manipulation.

It has been agreed and proved beyond doubt that the best means of training the eye and the muscles of the hand to habits of exactness and neatness in needlework, is by the use of well-framed and successfully taught drills. "*Drills*" are merely simultaneous movements, framed to train raw children's fingers (if one may so speak of the unskilled) into habits of accuracy and precision, with regard to needlework, by means of the repetition of certain actions at a given word of command.

Drills are of the greatest benefit where large numbers are concerned, and in the hands of a skilful teacher their value can never be over-estimated.

The following graduated steps in teaching are usually adopted, and in order to ensure success, it is imperative that each step be thoroughly mastered before proceeding to the next one:—

I. Needle threading.
II. Proper position of thimble.
III. Combining the use of needle and thimble.
IV. Placing material on finger for hemming.
V. The making of a stitch.

Before commencing any drill the teacher must exercise the class in showing right and left hands, in order to arrest the attention of her pupils, and to prepare them for prompt obedience to her commands.

In *teaching* a drill each action must be fully and slowly explained; then when the class are familiar with each step, just the set phrase may be used, and ultimately the numbers.

A teacher's position during the lesson on drill is *in front of her class*. No doubt there will be several backsliders, but it would be as well to give these little ones a lesson by themselves, than try to set them right individually, as by so doing the rest of the class may suffer. A large amount of patient labour, and untiring energy, are necessary to make little fingers produce the work required from them. Slow, steady, and repeated practice are the essentials to success. Ten minutes to a quarter of an hour is sufficient time to continue at drill unless the pupils are so far advanced as to be able to hem well without the preliminary commands, but these directions may often with advantage be continued in the lower standards of a girls' school.

STEP I.—NEEDLE THREADING DRILL.

Class taught.—Babies, three to five years.

Apparatus.—A threader, and a ¼-yard of fine twine or crochet cotton for each child.

A "threader" is a blunt pointed needle, about three inches in length, with a large eye, and a shank as thick as a No. 15 knitting needle. Threaders cost about 4½d. per 100. The teacher may use a large packing needle to demonstrate each step to the class.

No.	TEACHER'S COMMAND.	ACTION OF CHILDREN.
1.	Pick up cotton.	Take up cotton between thumb and finger of right hand leaving a little piece showing.
2.	Point the end.	Sharpen the end with left forefinger and thumb.
3.	Take up needle.	Take up needle between the thumb and the first and second fingers of left hand. Hold it with the eye upwards on a line with chin, and so that the eye can be seen.
4.	Cotton to the eye.	Let the right hand thumb rest upon the left thumb-nail, at the same time pointing the cotton to the eye of needle.
5.	Pass it through.	Pass thread through the eye —when just a little way in, take hold of the top of needle with right hand thumb and finger.
6.	Catch hold cotton.	Catch end of cotton with left hand, and draw through, making a long end and a short one.
7.	Show.	Hold up needle in right hand with ends hanging.

Remarks.—Some teachers prefer to use the left hand for the right, while demonstrating the drill to a class. This plan is optional, and although it may serve to make the children use the hand they should do, nevertheless, the position of the front and back of the teacher's hands are relatively wrongly placed, besides this left-handed working cannot be properly managed in teaching knitting.

If the teacher uses the same hand the drill directs, she must stand in such a position that the class can see every movement.

In working No. 5 it is advisable that the teacher should count *slowly* while the thread is passed through the eye of the needle; "twenty" as a commencement, and to be decreased as proficiency is gained.

The alternative method of showing No. 7 is to swing the needle on the thread while holding the latter between the right and left hand. Although this makes a variety, it is not to be recommended, as the proper placing of the cotton has eventually to be learned.

No. 5 sewing needles and No. 24 cotton, may take the place of the threaders as the class become proficient.

STEP II.—THIMBLE DRILL.

Apparatus.—Each child to be provided with a thimble, placed downwards upon the desk.

Note.—Besides the usual practice in showing right and left hands the class should be able to readily distinguish the different fingers.

No.	Teacher's Command.	Action of Children.
1.	Hold up right hand.	Hold the right hand so that the palm faces the chest. Spread out the fingers pointing them to the left. (About 4 to 5 inches from the chest is a convenient distance.)
2.	Take up thimble.	Put all the fingers of left hand round the thimble.
3.	Put it on finger.	Place thimble on middle or longest finger of right hand.
4.	Show.	Hold up for teacher to see.

Remarks.—No. 1.—The alternative method of holding down the first, third, and fourth fingers with the thumb, so that the second finger only is held up, is exceedingly difficult for little hands, and requires strong muscular power rarely possessed by a child; it needs a deal of practice to develop the muscles sufficiently to make a successful drill, while the method described is extremely simple and quickly learned.

No. 2.—Some teachers prefer holding the thimble between the thumb and finger only; this is optional, but the thimble is more likely to drop by this plan.

No child should ever be allowed to make a stitch without using a thimble, and one that will fit properly.

STEP III.—COMBINED NEEDLE AND THIMBLE DRILL.

(This teaches the method of holding the threaded needle in conjunction with the thimble.)

Class taught.—Lower Division, infants.

Apparatus.—Needle, thread, and thimble for each child.

Note.—Teachers cannot be too particular in enforcing the proper use of thimble and needle. No child will ever become a skilful worker until it has a complete mastery over its tools, and to teach the correct position of needle, thread, and thimble, *at the right time, viz., before material is used,* must be the aim of every infants' teacher. By neglecting this step progress is retarded, and worse still, bad habits are formed, which are most difficult to surmount, and good results are next to impossible.

No.	Teacher's Command.	Action of Children.
1.	Take up needle.	Take up threaded needle in right hand thumb and finger. —Point to left, eye to right.
2	Put needle under thumb.	Hold the point of needle just under the thumb-nail of left hand.
3.	Thimble upon eye of needle.	Put the *top* of thimble on the eye of the needle. (Any part of the top may be used, but the side next the forefinger is generally considered the most suitable.)
4.	Slip thumb and finger down the needle.	Slip the right hand thumb and forefinger down the needle to meet the left thumb, and hold firmly.
5.	Raise needle.	Lift the needle up a little way keeping the other fingers free, and the thimble still on the eye.
6.	Curve hand.	Bend the knuckles of the right hand a little towards teacher.

Remarks.—As the class advance, and the hands gain power over the needle, this drill may be shortened, but at the present stage, no time will be wasted, which is spent in perfecting the handling of the needle and the using of thimble.

IV.—WORK-PLACING DRILL.

Class taught.—Lower Division, infants.

Material used.—Small strips of soft calico, with hems fixed (about ¼-inch wide).

Large coarse specimen for teacher.

Note.—As this is the first time the children use material, the opportunity will be favourable for an object lesson bearing upon the same, also the other implements which have been used. Attention should be drawn to the fixed hem, and its use explained, also the position in which the work should be placed on the desk, viz., with the fold of hem upwards, distinguishing the right side from the wrong.

No.	Teacher's Command.	Action of Children.
1.	Take hold of work.	Take hold of work with thumb and finger of right hand, at the top right hand corner.
2.	Bend the left hand.	Bend the left hand towards the chest, placing the ball of the thumb midway on the cushion of the left forefinger, and bending the *second* joint.

No.	TEACHER'S COMMAND.	ACTION OF CHILDREN.
3.	Place work on finger and hold firmly.	Raise the left thumb, and place the right hand end of work over the first joint of left forefinger, so that the edge to be hemmed lies just above the bed of the nail of finger, and the thumbnail half way across the edge of hem. Hold firmly in place with the second finger.

Remarks.—For little children (infants and lower standards) it is advisable to hold the work over *one* finger, but as the muscles are developed it can be placed over two fingers if preferred.

V.—MAKING A STITCH.

Class taught.—Lower and Upper Division, infants.

Apparatus.—Strips of material with hems fixed, and about five or six stitches worked, the threaded needle being placed in position for making another stitch, just a little way in; thimbles: coarse specimen for teacher.

Note.—Some teachers prefer *teaching* this drill with the thread unfastened. This plan has its advantages, as the cotton is not so likely to get knotted, but the *slope* and *size* of the stitches already worked serve to give a correct idea of what has to be imitated.

It is supposed that the pupils are able to place the work in position, and hold the needle in the thimble properly, before commencing the making of a stitch.

Class-notice.—Needle (1) **IN**, on the single material—just touching hem; (2) **OUT**—up on the hem; (3) piece of material **ON** needle.

No.	TEACHER'S COMMAND.	ACTION OF CHILDREN.
1.	Place work.	Put the hem in position for work-placing drill, and so that the point of needle is under left thumb-nail.
2.	Thimble on needle.	These movements are fully described in Drill III., but as the class is more advanced the numbers are reduced.
3.	Take hold and draw out.	
4.	Make a stitch.	This must be well in front of the cotton, and the needle only put in a little way, pointing to middle of thumbnail. (For a first stitch the holes which the needle made will be a guide.)

In the Lower Division the next step should be to raise the work with the right hand (not moving the left thumb) to see if the needle shines through; if not, turn back and take the stitch again.

No.	TEACHER'S COMMAND.	ACTION OF CHILDREN.
5.	Move thumb.	Keep the fingers still, and bring the right hand thumb over beside the left one (the thumbs should form a right angle). Press firmly.
6.	Push needle in.	The thimble must push the needle through, almost up to the eye.
7.	Catch hold of needle.	Take hold of needle between the thumb and forefinger, keeping the thimble finger up, and draw the cotton out a little way.
8.	Draw out.	Close the thimble finger over the cotton and draw out over the third finger towards the right hand shoulder. The cotton is sometimes brought out *under* the third finger. The former plan is preferred.

Remarks.—In the Lower Division it is well that the class should repeat at each number what is to be done. Each individual teacher can frame words suitable for her pupils, *e.g*:—

1. I place my work over my finger.
2. I put my thimble on the eye of the needle.
3. I take hold of my needle near the point.
4. I make a stitch.
5. I move my thumb.
6. I push my needle in.
7. I catch hold of my needle.
8. I close down my thimble finger over my cotton, and draw up over my shoulder.

In the Upper Division the drill may be used to start the class, and then the pupils may work alone.

The exercise in position drill and hemming is not compulsory for children in or below the Lower Division of infants. Every teacher who knows the value of early finger training, will use all her energy to perfect her pupils in the foregoing drills, not merely because the Code requires infants to hem, and that it would be impossible to teach this individually—but for the reason, that all drill helps to secure prompt obedience to commands, exactness in detail, cultivates the faculty of observation, exercises the children's imitative abilities, and trains the muscles.

The above drills only give an outline of what may be done with a class of infants towards laying a good foundation. Each teacher should study her subject well, before attempting to demonstrate the drill to her class, as one is often tempted to neglect preparation for anything which seems so simple, and yet it is the simplicity (to the teacher) which adds to the difficulty of teaching. These drills are prepared for those teachers, who have not hitherto had occasion-to study the subject in detail, and are written, not as hard and fast rules, but merely *as a guide*, to be *increased* or *decreased*, at the discretion of the teacher, to suit the wants of her pupils, or any special circumstances attending the organisation of the school. It must be borne in mind that drills are the foundation of all successful teaching in needlework, and the teacher should remember that the training the children receive in this branch of work, although it may seem wearisome, will bear fruit later on, and infinitely repay for the trouble and time expended.

N.B.—It is not stated in the Code that children at this stage of proficiency are to fix hems; but a teacher should endeavour to give her pupils an idea of the method of turning a hem and fixing it. The leaves of old exercise books are suitable for the first lessons on turning a fold, then soft calico; supposing after several lessons only half a class are able to fix a hem nicely, these few pupils will be all the better for having acquired this finger skill, and the teacher will have the satisfaction of knowing, that besides saving her own time, she has begun to sow the seeds of "self-help" in her little pupils—a quality which adds so considerably to the happiness, well-being, and comfort of every individual.

III. HEMMING.

I. Introduction. — Before commencing to hem, it is very essential that the student should study carefully and actually work through the "Drills" in the preceding chapter, which will ensure that the material and implements used, are held in such a manner as to produce good hemming.

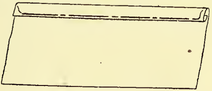
II. Definition of a hem.—A hem is a fold of material, turned down and folded over so as to protect a raw edge, and also to make a firm, neat border, to any household linen or article of clothing.

III. Preparation of material.—Hems are worked both selvedge and weft way of the material, according to that part of the garment upon which the hem is needed. Material is easier for children to *turn* if torn selvedge way, but the *stitches* show to better effect, if the material is the weft way of the stuff. The first turn must *not* be deep; for narrow hems, such as would be put at the edge of frills, or round a baby's first shirt, the first turn must be nearly as deep as the second; transparent material should have as much turned the first time, as is needed for the depth of the hem; for hems ¼ to ½ inch wide, half this distance is ample for the first fold; for wider hems, a quarter of the depth is sufficient. A rule often given by those who regulate by threads is—six threads for the first turn and twelve for the second turn.

If turning material selvedge way, the fold can be kept straight, by passing the middle finger of the left hand at the back of the material, after the thumb and finger have made the turn; if folding a curve, or weft way material, it is usual to plait the material under the right thumb.

Excellent practice is given by hemming round a curve, as for the bottom of a shirt, fancy pinafore or apron, armhole, neck, sash ends, &c., care is needed in fixing—if a *concave* curve, the hem will probably need stretching to make it set flatly; if *convex*, the turning must be eased or puckering will result. A hem will set nicely round a convex curve if small triangular folds of material be snipped out from the *first* fold.

IV. Method of fixing.—Tacking threads should be near the edge of the hem; a long stitch (say ½ inch) and a short one alternating, will be found more successful than continuous long stitches. (Fig.1.) This method of tacking is excellent upon flannel.



(Fig. 1.) Method of fixing.

V. Position of work.—Whatever width the hem may be, always place the edge of the hem just above the *bed* of the nail of the left forefinger, and hold it in position, by keeping the *middle* of the left thumb on the edge of the hem. Many persons prefer placing the work over *two* fingers, but as this requires greater muscular power, over one finger is better for children's work.

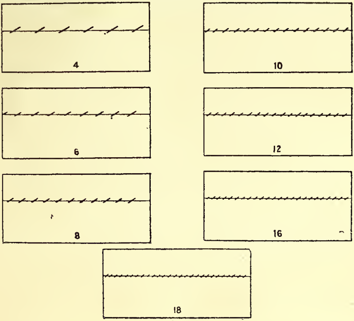
VI. Commencement of stitch.—Point needle away from the chest—catch only the upper fold—draw through till nearly ½ inch of cotton remains—tuck the end under the hem, using the needle for purpose—hold the thumb firmly upon the hem.

VII. Shape of stitch.—Half the stitch is on the right side of the material, and half on the wrong, forming roughly a triangle, the base of which extends from the lower part of one stitch to the lower part of the next; the point where the needle comes on the hem to be midway above the base. It will be seen that the stitch is the diagonal of an oblong; bearing this in mind, any number of stitches can be made to an inch, and yet correct in shape. The London School Board have issued a scale for the size of elementary stitches. The following is a copy of the hemming scale:—

Class.	No. of stitches to an inch.
Infants (Lower Div.)	4 to 8
,, (Upper Div.)	6 to 10
Standards I. and II.	8 to 12
Standards III. to VII.	12 to 16
Mull muslin work	16 to 18

(Fig. 2) illustrates the above scale.

This is not intended to convey the idea that stitches are to be counted, but to give some standard of uniformity. All directions such as these, need keeping more in the spirit than in the letter.

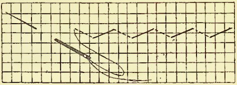


(Fig. 2.)

At each stitch the needle should, as it were, *scoop* up the material, and not skim over it. Hemming needs a peculiar position of the hand in order to produce a stitch which is well taken through and yet regular. The hand must be poised so that more of the back part of the hand is seen when putting in the needle, than is usual for other stitches, so as to enable the needle to dig up the material, in fact the point of the needle should be put in almost vertically, and then the back of the hand turned from the worker while the stitch is taken up.

The hemming stitch, as represented on canvas, is shown in (Fig 3). When making a stitch the needle should point to the *middle* of the left thumb-nail, which will produce the slanting stitch shown in diagram, making an angle of about 30° with the edge of the hem.

If the stitch be worked as described above, a wide open V-shaped stitch will be produced, and in order to work quickly it is necessary to make the stitch so. It has a prettier appearance, and is decidedly more practical than the upright hemming (as shown in the canvas sampler at the end of the book) which is now taught but rarely, and hardly ever with good results, as it always appears such laboured work.



(Fig. 3.)

VIII. Joins in cotton.—Cut the cotton off, leaving rather less than half-an-inch, slightly raise the hem, put the needle under the fold, unpick half a stitch, tuck this end under the hem, and proceed as for commencement; the little hole where the cotton was unpicked being already to receive the needle with new cotton. If the thread breaks, 1½, 2½ or even 3½ stitches must be unpicked, till an end sufficiently long is obtained to tuck under securely. Breaking the thread causes the material to pucker a little, but it must be straightened with the thumb and finger *before the stitches are unpicked*. Another plan sometimes adopted, is to leave the old end hanging after it is unpicked, commence with the new cotton, draw through till it is the same length as the other end, give the two ends a little twist, and then tuck under the hem. This is thought to be more secure.

IX. Finishing off.—The usual plan is to make another stitch over the last one, and then slip the needle up under the fold before breaking the thread.

When hemming over a thickness, such as a seam or another hem, put the stitches a little closer than usual, but do not attempt to take the needle deep; the work will be quite strong if only the top part of the lower thickness be caught; besides, the needle is less likely to break.

X. Depths of hems suitable for different purposes.

Article.	Width of hem.
Edges of frills	$\frac{1}{8}$ inch.
Baby's first shirt	$\frac{1}{8}$,,
Openings in garments	$\frac{1}{6}$,,
Pocket handkerchiefs (for infants' work a wide hem looks well)	$\frac{1}{6}$ to $\frac{3}{4}$,,
Bottoms of shirts	$\frac{1}{4}$,,
Ends of sheets, tablecloths, towels and kitchen cloths	$\frac{3}{8}$,, 1 ,,
Backs of children's frocks	$\frac{3}{4}$,, 1 ,,
Bottoms of chemises	$\frac{1}{2}$,, 1 ,,
,, nightdresses	$\frac{3}{4}$,, 1 ,,
,, drawers	$\frac{3}{4}$,, $1\frac{1}{4}$,,
,, pinafores and aprons ..	1 ,, $1\frac{1}{2}$,,
,, frocks	$1\frac{1}{2}$,, 2 ,,
,, flannel petticoats	$1\frac{1}{2}$,, $2\frac{1}{2}$,,
Tops of pillow-cases	$1\frac{1}{2}$,, 2 ,,

Note.—Whenever it is necessary to turn a square or oblong, always turn the *opposite* sides first, beginning with the selvedge side.

This will apply to the exercise in Standard III., D.

XI. **Faults** met with in hemming are:

(1) *Upright stitches*, caused by putting the needle in almost underneath where the cotton came out, instead of advancing a little distance onward. Also by putting the needle in perpendicularly instead of pointing it to the thumb nail.

(2) *Split* hemming (the worst fault), caused by not taking the needle through clearly to the right side, but letting it skim the threads, and consequently, with the least wear, the stitch gives way.

This may be overcome by following out the directions given under paragraph VII.

(3) *Single thread* hemming is not often seen now, since fine work has been so condemned.

(4) *Straight* hemming is made by putting the needle in horizontally as for running, instead of in an oblique direction.

(5) Stitches too small and badly proportioned.

(6) Commencement—joins—finish—insecure and clumsy.

(7) Hem not turned evenly, and badly fixed.

(8) Material puckered (cotton pulled too tightly.)

To ensure good hemming:

I. Make *every* stitch show through clearly on the right side.

II. Let all stitches be uniform in size (threads are not to be studied, but even distances gauged with the eye). Twelve stitches to an inch are a suitable size for students.

III. Make every stitch accurate in shape.

IV. Let the joins be strong and neat.

V. Be sure that the material is well flattened, when work is finished.

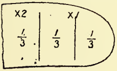
IV. SEWING.

I. Its use and application.—This stitch is used for joining two pieces of material together, when the raw edges have been turned in, as in securing the end of a band. It is also applied to selvedges, when it is necessary that they should be sewn together for the purpose of making material wider; selvedges are joined in making a pillow case, or in putting on gores. Children should not be taught to sew by using selvedges, as they are generally uneven and harsh. Sewing is one of the strongest stitches used in plain needlework. It should be worked upon the *right side*. The edges to be sewn must always be placed exactly together, and firmly tacked. No stitch so well repays for careful fixing.

II. Position of body and method of holding work.—The left hand should be held about five or six inches in front of the chest. The right elbow must be kept well up from the side, and the right hand curved towards the chest. The success of the work will entirely depend upon the way in which it is held. Sewing is worked from right to left; therefore as much of the material to be sewn as can be conveniently arranged, should be held loosely in the fork of the left hand, which is formed by the thumb and forefinger. This will prevent the work from dragging.

Imagine the first joint of the left forefinger divided perpendicularly into three equal parts. Place the beginning of the portion to be sewn at the upper edge of the finger, leaving one-third of the finger free. Hold the material in place by the left thumb.

The diagram (Fig. 4) shows the first joint of the left forefinger; X1 the position of the material in starting. The distance from X1 to X2 will be about the amount sewn, before it becomes necessary to move the work round the finger. The middle finger will be ready to hold in place the completed work. The material should only be moved so that the stitch at X2 is placed at X1, and the needle should be left *in the work*, as if about to make another stitch, while the position of the work is changed. By this guide, the ugly "break" in the regularity of sewing, which is caused by moving the material too far round the finger, is avoided. Great care must be taken that the sewing is held *round* the finger, and not *over* the nail, or puckering is certain.

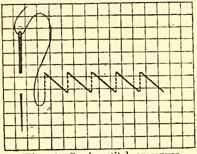


(Fig. 4.)
1st joint of forefinger.

III. Commencement.—Catch up just the extreme edge of the fold nearest the thumb, pointing the needle to the worker; draw through till rather less than half-an-inch of cotton remains; place this end along the top of the fold from right to left, using the needle for the purpose. For beginners, it is perhaps better that this little end be held down by putting the second finger over the first, and holding the end until a few stitches are worked (being careful to put the needle at the back of the cotton), by this time the end will keep firmly in place on the top of the seam.

IV. Shape of stitch.—This consists of an oblique thread from right to left on the right side, and a straight one joining the two edges on the wrong, producing a succession of printed Ns.

(Fig. 5) shows the stitch as illustrated on canvas. The dotted part of the stitch will be seen on the wrong side, when work is flattened.

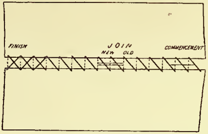


(Fig. 5.) Sewing stitch on canvas.

The needle must be inserted exactly at an angle of 90° with the work, so as to point straight to the chest. Any angle less than this will cause a larger amount of material to be taken between each stitch on the front side than the back, and, though only a trifle, will produce a pucker. Just the extreme edges of the fold must be taken up, or a harsh, clumsy ridge will result, which it will be next to impossible to flatten.

V. Joins.—Cut cotton, leaving about three-eighths of an inch; insert needle in the groove, and unpick half a stitch. This will bring the cotton out between the folds. If the thread should break off close (and for children, who are not always provided with scissors, it is necessary to break the cotton), *straighten the work* between the thumb and finger of each hand, and unpick $2\frac{1}{2}$ or $3\frac{1}{2}$ stitches then proceed as for commencement, the little hole where the last stitch was unpicked being ready to receive the new cotton. Both old and new ends can then be laid on the *top* of the fold, and *sewn over* as the work goes on; by this means, two perfect stitches, the one old and the other new, are side by side. A teacher should illustrate the method of joining on a coarse specimen (towelling will answer the purpose) and two coloured cottons. It is advisable when giving a lesson on a join for the first time, that the cotton should be *cut* off the required length (the teacher should do this), as unpicking only the $\frac{1}{2}$ *stitch* will present less difficulty. Then in a subsequent lesson breaking the cotton may be introduced.

A neat finish is made by sewing back for 3 or 4 stitches, producing little crosses, or turning round and sewing back, which is equally as strong. In fastening up the ends of a band, when the corner is reached, the needle may be slipped between the fold and the cotton cut off. This method is much neater and stronger than breaking the thread close. (Fig. 6) illustrates a join.



(Fig. 6.)

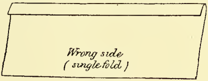
VI. Flattening.—Sewing is not completed until the work is *well flattened*. First remove the tacking threads. Various implements are used for this purpose; bone flatteners can be bought, similar to a toothbrush handle; the thimble is often used; but nothing does as successfully as the thumb-nail of the left hand—the tool which nature provides.

SEAMING.

I. Definition.—Seaming, *i.e.*, sewing in combination with a fell, is the method used to join two pieces of material with raw edges, when both right and wrong sides require to be made neat.

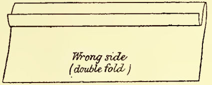
II. Preparation for seaming.—Two pieces of material are necessary. In class-teaching (Standard II.), children should be taught the preparation for a seam on strips of paper; extension or lined paper, such as is used for cutting out is admirable for the purpose. It is tough, and the lines indicate right and wrong side, and also guide the turning. For practice purposes, material should be selvedge way, as the appearance of the work is so much better when done, and seams are generally so in garments. Material on the selvedge slant or the curve has invariably to be seamed in a garment; therefore, it is essential that practice should be given in this particular, as soon as familiarity is gained with the straight threads.

To prepare—turn down a narrow fold nearly one-sixth inch upon the wrong side of one piece; fold the same depth on the right side of second piece; face the material entirely round, and fold over this last turn rather deeper than the first, so that the *raw* edge quite clears the folded edge. (Fig. 7.A.B.) A rule often given for a fell is, that the first turn should be two-thirds of the depth the fell is required to be when



(Fig. 7A.)

complete. Place the two wrong sides of the material together and tack, holding the double fold to the worker. and keeping the left thumb and finger firmly on the seam while the needle is put in

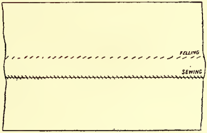


(Fig. 7B.)

for tacking. It is best to stab the needle through the work for the first two or three stitches of tacking, the edges are not then so likely to slip out of place. The work is now ready for sewing; when this is completed remove fixing thread, and flatten seam for felling Seams should always be narrow (¼in. or under, according to the texture of the material), but must be perfectly flat.

III. Felling.—The edge on the wrong side is neatened by a fold of the material being hemmed down to cover the raw edges. This fold is called a "fell," and is so named because one piece of material is "struck" or "flattened" on to another. This stitch is *exactly* the same as hemming, only the material is more cumbersome to manage in the hand—hence the reason why the stitches are often so much more irregularly worked and badly shaped, than for hemming. When working on small specimens, gather up a portion of material in the fork formed by the thumb and finger of left hand. This prevents dragging, and illustrates what must of necessity occur in a garment.

(Fig 8) shows seam complete.



(Fig. 8.)

For sleeves, where one piece of stuff is on the straight, and the other on the oblique or slant, always make the double turn on the straight side, as the seam is less likely to become stretched or puckered. The oblique side must be put to the under part of the arm, and held to worker while sewing.

Where similar fells occur in garments, they should be in pairs, *i.e.*, the fells should face. This is effected by starting the *turning* properly, thus:—

Chemises and nightgowns	Right seam from armhole. Left seam from hem at bottom.
Drawers	Right leg from knee.
,,	Left leg from seat.
Sleeves	Right sleeve from wrist.
,,	Left sleeve from armhole.

Each student is advised to practise this. It is a detail, but these little points make all the difference between a well-arranged garment and a poor one.

IV. Faults met with in seaming are :—

(1) Uneven turnings, and consequently a clumsy seam.

(2) Badly shaped and irregular stitches.

(3) Puckering the sewing. This is easily avoided, if the directions given above for holding the work and putting in the needle, are carefully carried out.

(4) Beginning and fastening off insecure.

(5) Joins defective.

(6) Seam not flattened.

V. STITCHING.

I. Introduction.—Stitching, or back-stitching as it is sometimes called, seems to have fallen into disuse upon hand-made garments, probably from the amount of time taken to produce a quantity of any length, and as this is the stitch which the sewing machine imitates so quickly and accurately; but stitching is exceedingly useful where any strength is needed, and the fact that it is the only kind of ornamentation applied to men's and boys' shirts, seems sufficient reason to warrant attention to a few details which lead to the successful working of the stitch. Every woman should be able to make a shirt entirely by hand, even though she may not always have occasion to do so. In many continental schools, seams in garments are "stitched and felled" (in place of our "sewing" or "running," which would be considered scamp work); this is not to be recommended, as it is a waste of valuable time and a misapplication of good eyesight.

II. Uses of stitching.—(*a*) For ornamentation—when worked upon neckbands, wristbands, sleeves, fronts of garments, &c., to give a neat finish. (*b*) For strength—when used for setting on tapes and buttons, joining seams in bodices and skirts, and making neat the lower part of placket holes and openings, when one portion of a garment is wrapped over another.

III. Preparation of material.—Stitching is worked selvedge way when it is used upon bands for ornament, and left to choice to work a specimen, always prepare so, as the work presents a better appearance when done. Many persons raise an objection to a thread being drawn for the purpose of keeping the stitch straight, on account of its weakening the fabric; but, as will be seen from the wrong side appearance of the work, although one thread is withdrawn, a double cotton is supplied in its place. A drawn thread is a great assistance to a child in securing regular and even stitches; other guides are—a crease; a line of tacking; a mark scratched with the needle. It may be considered admissible to draw a thread when stitching is used for ornament, but decidedly not when needed for strengthening purposes; even distances must then be gauged by the eye, as would also be necessary in stitching the rounded corners of collars and wristbands.

The girls of Standard III. are required to prepare a band and stitch a portion of it; therefore at this stage it becomes necessary to know the proper method of preparing a band, as it will be paving the way for gathering and setting-in to the band needed for Standard IV.

All bands should be cut so that the length of band is *selvedge* way of material; the width will depend upon the part of the garment for which the band is intended. Do not use a selvedge, as it is rarely even, and often leads to a pucker when gathers are set in; it only wastes a few threads to tear it off, and well repays in appearance. If you should be obliged to use a selvedge, place it to the back part of the band. Before turning in raw edges, it is well to decide upon what part of the band the stitching is to come, as if a thread is withdrawn, it will be necessary to remove it before any fixing is done. The distance from the edge of the fold at which to draw the thread is optional. It will depend upon the width of the band, and whether one or two rows of stitching are preferred.

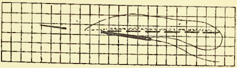
(1.) Directions for drawing thread.—Double the band to decide position of stitching. Choose a thread which looks rather coarser than the surrounding ones, loosen it about half an inch from the weft raw edge, and hold this end *firmly* (do not pull it) between the right hand thumb and forefinger; with the same fingers of the left hand, keeping the thumb over the thread and the finger below, gently ease the *material from the thread*. By this means an end of several inches may often be withdrawn without the thread breaking.

For teaching purposes a thin loose make of calico should be chosen. Horrocks' A. is recommended.

(2.) To prepare the band.—Turn a narrow fold $\frac{1}{6}$ inch on wrong side, selvedge way—same on opposite side—treat the ends in the same manner, pressing corners. Be sure all are true to a thread. Fold the band in half lengthways, pull it to straighten it, and make it set flatly, and fix the edges together.

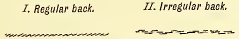
IV. Rule for stitch.—Stitching must always be worked on double material.

To commence—Slip the needle between the fold above the line for stitching, and bring out close to the right hand end of the drawn thread. Count two threads to the right from where the cotton comes out, insert needle in a straight line and bring out two threads in front of cotton, making four threads on the needle in all. (Fig. 9.) Every stitch is formed in the same way, care being taken to put the needle back *exactly* at the end of the last stitch, which will avoid any threads being left between the stitches, and so keep a continuous line. If the material is fine, three threads may be taken up, making six in all, or even more, providing regularity is kept. The appearance of the wrong side is also a matter of some importance. At the back it will be seen that there is a long stitch, *i.e.*, double the length of the one in front. When the needle is inserted, it should be *below* this long stitch, so as to avoid splitting it. This necessitates giving the needle a little slant (slightly in the direction of the hemming stitch) and so produces a cable on the wrong side. This cord-like appearance is not difficult to obtain, if



(Fig. 9.) Stitching on canvas.

the first finger of the left hand just guides the stitch at the back, while the needle is put in, and the regularity of the right side is thereby increased. (Fig. 10.) This is a detail, but can hardly be looked upon as a grave fault, and should not be criticised with



(Fig. 10.)

beginners, although for a high standard of efficiency it is essential.

V. Joins.—Proceed as though about to make another stitch, pass needle to wrong side, and darn in and out neatly. The new thread should be treated as for commencement, and brought out the required distance in front of last stitch. Another method of making a join is to pass the needle through to the wrong side, and sew over the stitches at the back, forming a cable. This makes a bulky appearance on the wrong side, and is certainly not so tidy as the former plan. It is not necessary to make much of a join in stitching, as it is almost a fastening in itself; neatness is the chief feature.

VI. Faults likely to occur:—

(1) Material badly prepared.

(2) Commencement and joins insecure and untidy.

(3) Cotton pulled too tightly, and so producing holes between each stitch.

(4) Threads left between stitches (the common fault with beginners).

(5) Stitches not uniform in size, and in an irregular line.

(6) Uneven appearance on the wrong side, caused by putting in the needle sometimes above the back stitch and sometimes below it.

(7) Split stitches, resulting from taking only the upper fold iostead of making the needle pierce the double material.

VI. SETTING ON TAPES.

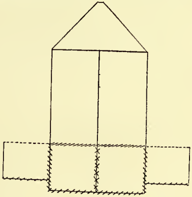
I. Introduction.—This process is taught in Standard III. upon a stitched band. There are several methods of securing a tape to a band. The teacher of a Third Standard should select one plan and definitely teach it, and not try to combine two or three ways in the course of a short time, unless she has exceptionally skilful pupils.

The lesson should be demonstrated by the teacher using a large piece of paper prepared as for a band, and a strip of contrasting paper to represent a string; then, by means of this ready apparatus and a blackboard she may expect a good result from her pupils, providing they strictly follow her instructions. The teacher should work each step with her class—slowly.

II. Use of tape strings.—(1) Strings are used for the purpose of tying together certain loose parts of clothing, or house linen, for comfort and neatness, *e.g.*, aprons, pinafores, frocks, drawers, pillow-cases, &c. (2) Loops of tape are frequently put upon towels, as a provision for hanging them upon a hook.

III. Position of tape strings.—When put upon a band, intended just to meet, the tapes should both be sewn to the edge of a band. If the band is meant to overlap, as for a pinafore, apron, or drawers, the right hand tape will be sewn on the under or wrong side of band at the edge, and the left hand tape on the upper or right side of band, at a convenient distance from the edge. (See Fig. 15.)

Towels usually have the loop of tape at the corner, or at the middle of one side. (Fig. 11.)



(Fig. 11.) Hem of towel, showing loop.

See page 175 for a detailed method of putting on—

(*a*) **A strengthening tape.**

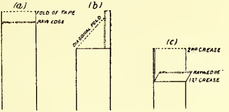
(*b*) **A loop for a towel.**

A barracoat, or infant's long flannel, should have one set of tapes at edge of skirt, and the corresponding set several inches from the edge on the right side. For pillow-cases the tapes are placed quite an inch from the edge.

IV. Rules which apply to every method of setting on a tape.—(1) The tape must be in a suitable place, relative to its use on the article. (2) The width of tape regulates the depth of tape to be attached, *e.g.*, it is usual to allow the tape to form a square on the material. Very wide tape is sometimes made to form an oblong. (3) The stitches must be strong and well-shaped, and every stitch show through clearly, or else not any. It is often difficult if the material is stout to make the needle pierce the double stuff. (4) The ends must be neatened. (5) The tape itself able to resist a good pull. (6) The general appearance perfectly flat.

V. Different ways of securing tape to material.—(1) Method suitable for Third Standard pupils. It is presumed that each child has a stitched band, upon which to sew the tape at the end (*not at right angles to the folded edge of band*). This increases the difficulty of putting on, but it must be mastered, as it so often occurs. It is needless to remark that there should be no raw edges anywhere upon the band.

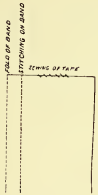
Preparation of tape.—Commence by turning down a narrow fold, say one-sixth of an inch ("*a*" in diagram); turn the tape round so that raw edge faces away from worker; fold over the top left hand corner, till it is exactly below the top right hand corner; this forms the diagonal of a square ("*b*" in diagram); raise this fold and make another crease, perfectly straight, from the corner of the diagonal, across the width of the tape ("*c*" in diagram). The tape is now folded as for a sew and fell. (Fig. 12.)



(Fig. 12.)

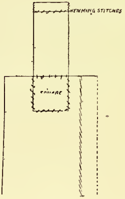
To secure tape to band.—Hold stitched band so that right side faces worker. (Fig. 13.) Place the raw edge of tape to wrong side of band, keeping the crease which was folded last (2nd crease) even with the edges of band; hold firmly between thumb and finger; three edges are seen, two of the band and one of the tape; if the material is soft, the three may be sewn, but at any rate the fold nearest worker and the fold of tape must be caught; begin to sew at right hand corner of tape; do not break off the cotton when tape is secured; lift up the long end of tape, and a little square will be seen on the wrong side in readiness for felling around three of its sides. (Fig. 14.) No fixing is necessary. Flatten the sewing. It is a good plan for a teacher to gauge the number of stitches that may be put in each side, and tell her pupils. This may seem a detail, but secures uniformity, and of course may be dispensed with as proficiency is gained. To finish off, slip the needle between the material and the tape. If it be wished, the side of the band may be sewn up without breaking the cotton. Flatten work.

The end of tape must be turned for a narrow hem, so that the hemming stitches may come on the same side as the felling. The



Right side of band showing position of tape at edge.

(Fig. 13.)



Wrong side of band showing position of tape when complete.

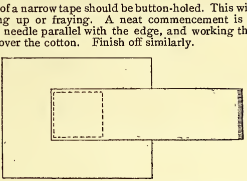
(Fig. 14.)

sides of this little fold must be sewn; the number of stitches needed may again be a useful guide to a child. Guard against upright stitches in this tiny piece of hemming. It is a difficulty for little fingers to manage so small a hem—hence the error in the shape of the stitch. When the second side is sewn up, slip the needle *along the hem* and break off cotton; draw the thumb and finge across the hem to flatten it out well.

A result similar to the above is produced by preparing tape as described, but instead of placing the raw edge of tape to wrong side of band, keep the tape on *right* side with the *raw* edge of the square facing worker, sew and fell as explained above. Children should be practised in putting on tapes of various widths.

If a tape be put on the right side, it is usually stitched to form a square. (Fig. 15.)

The ends of a narrow tape should be button-holed. This will prevent them curling up or fraying. A neat commencement is made by running the needle parallel with the edge, and working the button-hole stitch over the cotton. Finish off similarly.



(Fig. 15.)

In the above diagram the square of stitching appears somewhat like running, but every stitch must touch the previous one.

Another method of putting a tape on wrong side, as for a pillow-case, is as follows:—Place raw edge of tape parallel with fold of material at a suitable distance from the edge; fix in place and stitch upon the right side, while holding the edge of the pillow-case to worker; do not break off; pass the needle to wrong side; fold the tape back over the stitches just made, and fell down one side as far as will form one side of a square when tape is complete; pass needle to right side; stitch across as before; put needle back again and fell to match opposite side; slip cotton between folds and cut off. (Fig. 16.)

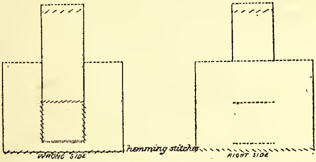


Fig. 16.)

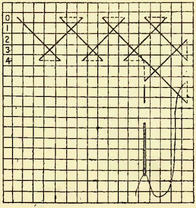
VI. Faults met with are:—(1) Tape badly prepared. (2) Tape put too close to edge of band, not forming a square when fastened to material. (3) Stitches insecure and badly formed. (4) Ends of tape with raw edge, or, if hemmed, corners untidily fastened, or not sewn at all. (5) Tape puckered and clumsy in general appearance.

VII. HERRING-BONING.

I. Introduction.—This stitch is used in making-up flannel garments, or upon any woollen material. Herring-boning is necessary to protect the raw edge, and so takes the place of a hem or fell. It should be taught upon single thread canvas (not Penelope, such as is used for wool work) and illustrated upon demonstration frame and blackboard. Any school draper will supply suitable canvas at 7d. or 8d. a yard.

II. Description of stitch as worked upon canvas.—It is begun at the left-hand side, and is formed from left to right. It should be four threads deep. To commence—bring needle through at the left hand side of canvas, and leave a finger length of cotton hanging, which can be secured when work is done; count *down* four spaces from where the cotton comes out, and four spaces to the right; take two threads on the needle horizontally; now four threads *up* from where cotton comes *out* and four spaces to the right, taking up two as before, and so on. Although this is an easy stitch to teach children they often get confused between *spaces* and *threads*, being liable to count the hole where the cotton comes out as *one* space, and so produce an irregular stitch. If the first few stitches on canvas are not correct in shape, the whole line is generally thrown out. This difficulty may be entirely overcome by calling the hole where the cotton comes out as *nothing*, and then counting one, two, three, four, as usual. Teachers having charge of Standard III. are advised to try the efficacy of this plan.

It is as well to teach the turning of a corner on canvas, as this will be paving the way for the corners of the flannel patch needed



(Fig. 17.)

for Standard IV. The diagram will show the method of working. (Fig. 17.)

To fasten off always stop at upper part of stitch, pass needle through to wrong side of canvas, and run through other stitches at back; thread needle with cotton left at beginning and treat in the same way.

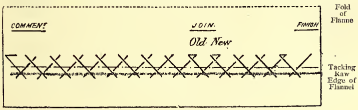
Herring-boning on flannel should follow the above exercise.

Another method of fastening on and off, is to run the needle along parallel with the herring-bone stitches. This should be done on the uppermost side. Although this is practically what takes place on the flannel, it is decidedly more difficult for a child to make neat, and on canvas, strength is not of the first moment.

III. Preparation of material.—For practice purposes it is better to use flannel torn selvedge way, although in garments weft way of material has often to be worked. It is an open question as to which is preferable—*tearing* or *cutting* flannel. Many are in favour of the former, and cutting the fringe off before herring-boning. If flannel be torn selvedge way this fringe is short, but weft way longer and more irregular in length. The woolly or fluffy side of flannel is the right; on the wrong side the threads can be seen more distinctly. This fluff is called the "nap," or "ply." In cloth, velvet, and plush, it takes the name of "pile." Garments should be always made up with the ply running downwards. The way of the nap is easily detected if the hand be brushed down the flannel. If little lumps of fluff are seen, the hand is rubbing against the nap.

When the fold has been turned the required depth and firmly fixed, the work is ready for herring-boning.

IV. The stitch on flannel.— *To commence* — slip needle between the double material, and bring out four threads up on the fold, make one or two backstitches to secure cotton, and work as upon canvas. The stitches should be made so that the *lower portion of stitch comes exactly under the raw edge of flannel*, and the little crosses of the *upper* row just opposite the spaces between the crosses at the *lower* row. (This should be specially noted.) All stitches should show through clearly, so that the reverse side looks like the work on canvas, viz., two lines of running. Threads should not be counted after a few stitches are worked, but even distances gauged by the eye. Sometimes that part of the stitch which comes on the fold is not taken through the two thicknesses of material. This is not suitable for practical purposes, as the stitch is not sufficiently secure for washing well. *To join*—stop at upper part of stitch, as the double material will



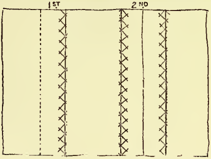
(Fig. 18.)

then hide the end of the cotton; slip needle between fold, and secure by a backstitch on the last herring-bone stitch (this forms only half a stitch with the old cotton); commence with new thread in the same manner as at starting, only bring needle out two threads in front of last half stitch, and fasten as before. The diagram will illustrate these processes. (Fig. 18.)

Herring-boning is worked upon the wrong side in garments, but in patching is shown on the right side as well.

V. Use of the stitch.—For securing and making neat the raw edge of woollen material, and thus preventing it from ravelling. All flannel shrinks more or less in washing, and no other stitch, being so loose, makes allowance for shrinkage as much as herring-boning.

VI. Methods of making seams in flannel garments. (Fig. 19.)



(Fig. 19.) Seams in Flannel Work.

(1) Place the two right sides together keeping the back edge about a quarter of an inch above the front; join the material by run stitching (*i.e.*, a backstitch, and a few stitches of running. In making the backstitch, the needle should be brought *out in the same place* that the cotton comes from, and then the running stitches taken on the needle; the stitches will then appear regular on the reverse side). From three-eighths to half an inch is a suitable depth for the running. Cut off any fringe from the back edge, open the seam so that the hand can be placed along the right side, turn the back edge over the front, tack it down, and herring-bone it flat. If running together a sloped side and a straight, hold the slanting side to worker.

This method often produces a bulky seam, but is the one in common use.

(2) A flatter seam is formed by placing the two edges together evenly, right sides touching, run stitching about ⅜-inch down, flattening out right and left, and herring-boning each edge.

(3) Some people still adhere to stitching and herring-boning the seams of flannel. Time might be more profitably spent, as the stitching is upon the wrong side, and the run stitching is quite strong enough, providing it is worked well.

The preparation for stitching seams would be similar to method (1) only the material held so that the back edge is uppermost instead of the front. This plan needs very careful fixing.

VII. Faults liable to occur are—

(1) Commencement and fastening off insecure and untidy.

(2) Incorrect shape to stitch, the crosses of upper row not being *exactly* opposite the space in lower row, and *vice versâ*. (This is a common fault with beginners, who generally produce a leaning stitch to the right, caused by not putting the needle in a sufficient distance to the right in the *lower* part of the stitch.) An illustration of the cause on blackboard, or on a paper specimen, will soon correct an error in this respect. As much material should be taken *on* the needle as is left *between* each stitch. The tendency is to leave *more* threads *between* the stitches than are taken on the needle.

(3) The upper row of stitches not kept four threads up on the fold, and the lower row not effectually covering the raw edge.

(4) The top part of stitch not taken through the thicknesses of material.

(5) Cotton pulled too tightly, and so producing a pucker.

VIII. PLEATING.

I. Introduction.—This process answers the same purpose as gathering and setting into a band, but the latter is a far more important branch of work. Pleating is not suitable for garments which need ironing, as the material cannot so easily be flattened; but, by its adoption, a greater variety of garments can be made in the lower Standards, as well-formed pleats are infinitely to be preferred to clumsy gathering and setting-in.

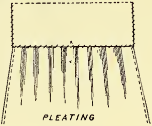
Pleating is the usual method of arranging the fulness of flannel into a band.

II. Definition.—A pleat is a fold of material of any width, secured in place by a few stitches, and kept firm by a band felled at right angles to the fold.

III. Preparation of material.—Pleating is formed the weft way of the stuff, as the material will both set and wear better. It comes natural to pleat weft way in the making up of garments, (that is if cut out properly), but in working small specimens this is a point for criticism. The proportion of material to band will vary with the garment in making, and the size of the pleat required. About 2¼ times the length of that portion of band into which the pleats are set, is a suitable amount. The material to be pleated should be halved and quartered, so that all fulness may be evenly distributed. It is usual to arrange the pleats, so that half the required number face to the right, and half to the left. The corresponding pleat on either side of centre should match in size.

The band can be prepared as directed in the chapter on gathering (page 42), carefully fixed at an even distance (¼ inch) from the edge of the pleats, and neatly felled on both right and wrong side. (Fig. 20) shows a specimen complete.

(Fig. 20.)



IV. Points for criticism:—

(1) Material badly prepared.

(2) Pleats irregular, and unsuitable in size to the garment in making, and setting clumsily.

(3) Puckered appearance of band,

IX. GATHERING—STROKING—SETTING INTO BAND.

GATHERING.

I. Definition.—The word "gather" means to collect or draw together into a mass, and is the process used when a full part of a garment is required to be set into a shorter and narrower portion of material, called a band.

II. Reasons for usage.—(1) Certain parts of garments need to be loose fitting, in order to give freedom and gracefulness to the body, and play to the limbs, and to ensure tidiness, comfort, and regularity, this fulness is gathered and distributed equally along a band—*e.g.* :—

1. Skirts are gathered into waistbands.
2. Sleeves are gathered into wristbands.
3. Upper parts of garments are gathered into neckbands.
4. Legs of garments are gathered into kneebands.

(2) Garments which are gathered present a much nicer appearance when ironed, than if pleating had been used, because the point of the iron can be taken close to the band, and so all the surrounding material can be flattened out and smoothed.

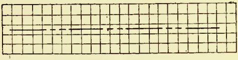
III. Preparation of material.—The gathering stitch is always worked the *weft* way of the stuff, so that the selvedge runs *down the sides*. It is always so in garments (that is, if they are cut properly), but in practising upon specimens this is a point sometimes overlooked, and consequently leads to loss of marks. Gathers set so much better if worked the proper way of the material, and the stroking cannot be well done unless this is attended to. In garments it is often necessary to gather on the *weft slant*. In order to ensure the gathers being arranged equally into the band, it is necessary to mark the half and quarters of the material to be gathered. These distances are best marked with cotton, about one inch below where the gathering is to be done. In working specimens for practice, it is imperative that the *sides* of the material should be hemmed or at least tacked.

The gathering stitch should be worked upon the *right* side of the material, about ¼-inch or a trifle more from the edge. The stitches run parallel with the weft threads, or from selvedge to selvedge. It is a help towards keeping the stitch straight, if a crease be made by flattening down the wrong side over the right, and turning it up again. The gathering cotton can then be kept along this crease ; upon no account must a thread be drawn.

It is advisable to use coarser cotton than that in ordinary use upon the garment. (If working with No. 60, for gathering, No. 40 would be suitable.) Many people gather with double thread, so that if one thread should break, the other may be likely to hold. It is not advisable to *teach* the stitch with double cotton, as it is liable to get knotted, but it may be used at the discretion of the worker, on thin material for example, where a coarse needle would perhaps leave marks in the fabric.

IV. Rule for the stitch.—Never use a knot to secure the end of cotton; take up a few threads in the crease; leave ½ inch of cotton; take the same amount of material on needle again, and draw through till a small loop remains; catch in (with the needle) the little end of cotton left; tighten; take another backstitch, and pull to test if cotton is secure.

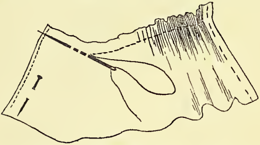
The quantity of material taken on the needle should be *exactly* half of that passed over. Take up 2 threads and miss 4, or, if fine material, 3 and 6 or 4 and 8. If this regularity be not kept, the whole effect is spoiled. Threads should not be counted after the first few stitches, but the proportion kept by the eye. (Fig. 21), shows the stitch upon canvas.



(Fig. 21.) Gathering stitch upon canvas.

The dotted part of the stitch will be seen on the reverse side.

If a long piece has to be gathered, new cotton must be taken at the half and quarters, and the old thread left hanging. When proficiency is attained several stitches may be taken on the needle before drawing cotton through. The stitch is usually worked upon *single* material, but in gathering for the waist of a frock or petticoat it would often be upon *double* stuff. (Fig. 22) shows the work in progress.



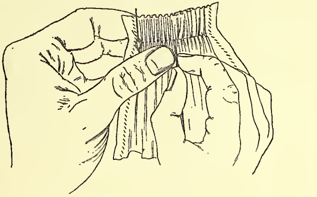
(Fig. 22.) Gathering in process of working.

The diagram shows the material drawn up as the gathering thread is put in. This is not advisable when teaching, because any irregularity is easily detected if the work be kept flat, and in the making of garments, which have to be folded from time to time, it is better that the material should not be drawn together until ready for stroking, as the garment will be less likely to become creased.

STROKING.

V. Preparation.—When the gathering is complete, the cotton should be drawn up moderately tight, and a pin, taking up a *few* threads, placed exactly by the end of cotton, which should be secured round the pin three or four times. (Always put pins in work for this specimen with points upward.) It is a help to successful stroking if the gathers are pulled above and below the gathering thread, and so partly straightened into place. The aim in stroking is to place the gathers evenly side by side in little rucks, ready for setting-in. This evenness disappears the first time a garment is washed, the only result being the regularity of the gathers in the band. The stroking might be done with the right hand thumb and forefinger, if the gathers were sufficiently large to allow it. The eye of a sewing needle or darning needle, or the point of a rug or carpet needle may be used ; not the point of a pin.

VI. The act of stroking.—This is done upon the right side, and begins at the left hand. Hold material between the left thumb and forefinger, so that a few gathers are at the top of the finger ; the thumb must be kept *below the gathering thread*; hold the stroking needle between the right hand thumb and forefinger ; it should point quite flatly or horizontally into the groove between the gathers just as the hands of a clock at noon. Each gather must be gently raised up with the needle, laid under left thumb, and pressed firmly. The stroking needle need not guide the gather for more than ½ *an inch* below the gathering thread. Great care is necessary to avoid "scratching," or "striking" the fabric, as it is so soon injured by careless stroking, and consequently splits in the washing. While the needle is arranging the gathers, there is no occasion to make any sound by its use. The gathering thread may require tightening as the stroking proceeds. When all the gathers are arranged *below* the thread, the work should be turned completely round, and the material stroked which will be covered by the band, or that which was *above* the gathering thread in the first process. This is very essential. (Fig. 23) illustrates stroking in progress.



(Fig. 23.) Stroking.

Another method of stroking is as follows :—Instead of holding the gathers facing worker as directed above—place the material so that the gathering thread is almost at right angles with the worker, and the thumb halfway above and below gathering thread—then with the stroking needle, lay each gather alternately above the thread and below it, under the pressure of the left thumb.

SETTING GATHERS INTO BAND.

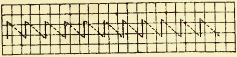
VII. Proportion of band to material gathered.—The *rule* is, that the band should be *half* the length of the material required for gathering. An inch or two more of gathering material to every ¼-yard of band greatly improves the fulness. It is often necessary in making garments to allow less material than stated above, but of course the gathers are scanty and do not set so well.

VIII. Preparation of band.—If a *straight* band is required, it should always be torn so that the length is selvedge way of the stuff, because these threads are strong and firm, and the band will wear so much better, besides presenting a nicer appearance. Shaped bands, such as are often used for petticoats, and yokes, require more skill in putting on. The width of the band is a matter of taste, it quite depends upon which part of the garment is in making. Never use a selvedge, as it often causes a pucker while the gathers are being set in. If compelled, for the sake of economy, to make use of a selvedge, place it to back part of band. Turn down a narrow fold, about one sixth of an inch on to wrong side, selvedge way—same to opposite side—treat the ends of the band in same manner, firmly pressing corners. Be sure all sides are straight and true to a thread, or else the whole effect of the setting-in will bespoiled. Fold band in half lengthways, and *tack* up the sides, leaving *quarter of an inch free at the folded corners*; this will admit of the back part of band being kept up out of the way, while the gathers are set in on right side. Halve and quarter band to correspond with divisions of garment.

IX. Fixing the band.—Remove the pins which have secured the gathering thread. Loosen the gathers to length of band. Have in readiness a few *small* pins. Place the front edge of the half of band on the half of the gathering material, *just to the cotton*. Secure by a pin placed thus:—Pass point of pin through band, through gather, and up through the band again. This will hold firmly (children need to have this clearly demonstrated by teacher). Treat quarters in same way, and the beginning, and end. Draw up the gathering thread, till it is just even with the edge of band, and secure the thread around the pin. If only a small quantity of gathers is to be set in, it is hardly necessary to tack the work, pinning being sufficient, but should tacking be needed, the following method is more suitable than ordinary tacking:—Bring needle through on the right side of band about ¼-inch up from the edge which rests on the gathers: put needle in, exactly below where cotton came out, and take a slanting stitch, about ½-inch from the first one, bringing needle out ¼-inch up on band, as before. This will produce a small *upright* stitch on the right side, and will admit of the gathers being shifted with the needle, so as to regulate them easily. (Fig. 25.)

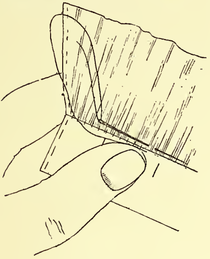
X. Position of work for setting-in.—*Hold the band* towards worker, not parallel with the body, but inclined to it at about an angle of 30°. Let the left hand forefinger be placed just under a few gathers, and hold the band in place with the end of the left thumb. The right elbow must be kept well up from the side.

XI. The setting-in stitch.—(Fig. 24.) Commence as for hemming by tucking end of cotton under band. (1) Take up the ruck

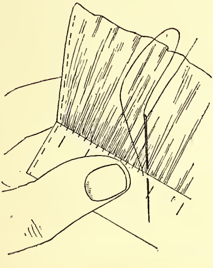


(Fig. 24.) Setting-in stitch on canvas.

which forms the gather, parallel with the gathering thread, and (2) turn the needle round so that the eye is turned away from the band, and the point is in readiness just to take the extreme edge of the fold of band. In making the next stitch



(Fig 25A.)
Showing *first* position of needle.



(Fig. 25B.)
Showing *second* position of needle.

When working quickly the two positions become almost one movement.

the needle should be put in exactly below the place where the cotton came out in previous one, *and behind the gather or ruck*. The little *upright* stitch (not quite so, if the gathers are scanty) will then fall *in the groove* formed by the gathers. The cotton must not be pulled in the least degree tightly, or puckering of the band is certain. The setting-in stitch is similar to the letter N, the straight part forming the right side. (Fig. 25 A.B.) shows the work in progress.

The gathers will need regulating with the needle as the work proceeds. Remove the pins as soon as convenient. When the end of the band is reached, the corner may be sewn up with the same cotton as is used for the setting-in, without breaking off. When the side is sewn, slip the needle between the fold of band and cut cotton.

XII. Wrong side of band.—Before fixing this, thread needle with gathering thread, and fasten it off on wrong side. The wrong side of band will need careful fixing. Keep the edge *well up* on line of gathering, *just a trifle* above it is perhaps preferable, as the whole appearance is so easily spoiled by a careless treatment of the back of the band. Set-in the *wrong* side in just the same way *as the right*. It will be much easier though, as the gathers are all arranged. Be very careful that no stitch shows through on the right side. Do not pull the cotton too tightly, or it may cause the band to pucker on the right side. Sew up the corner and fasten off as before.

XIII. Faults met with are:—

(1) Gathering material wrongly prepared, so that the stitches are worked with the selvedge instead of weft way.

(2) Irregular gathering—line of stitches not at a suitable distance from the edge. Knots for commencement.

(3) Faulty stroking. (1) Material harshly scratched, so that a line of marks is left on the stuff, or (2) insufficient stroking, so that gathers are not regularly placed for setting-in.

(4) Band prepared the wrong way of the stuff—badly turned.

(5) Gathers unevenly distributed along the band.

(6) Band clumsily fixed on. Gathering thread showing.

(7) Incorrect stitch in setting-in. Every gather should have *its own* stitch, which must be *behind* the gather and in the groove, not slanting across the gather as for hemming.

(8) Band twisted, often caused by want of care when working the wrong side. Back setting-in stitches showing on right side.

(9) Corners untidy, bulky, and insecure. Ends of cotton left.

(10) General puckered appearance, and clumsy effect of the whole.

XIV. Remarks.—The regular appearance of the right side of the work is much improved, by gently re-stroking the gathers after the setting-in is finished.

To teach gathering successfully to a class, it is imperative that the teacher should provide herself with a large specimen upon which to illustrate each step. A piece of coarse towelling and a coloured thread are a ready and an excellent means of demonstrating each stage of the work.

X. BUTTON-HOLING AND BUTTON-HOLES.

I. Introduction.—Probably no stitch in plain needlework needs such careful attention in detail, as the above. A button-hole is first taught in Standard V., and exactly the same principles should be adopted by any worker, the sole difference being in the "style of execution," which can only be acquired by practice. Skill with the fingers is most necessary to successful manual work of any kind, as the thumb and forefinger assist greatly in manipulation. Too much stress cannot be laid upon the *position* in which work is held. Teachers should impress upon pupils the necessity of grasping the material firmly between the thumb and finger. To acquire skill with this grip should be one of the aims of a needle-woman, as it is this feature which gives that neatness of execution which so stamps "well-finished work." Button-hole working affords excellent practice in precision, accuracy, deftness with fingers, and neatness, as it is an invaluable lesson in training both hand and eye.

II. Description.—A button-hole is a "slit," worked all round with a knotted edge. The ends of the slit can be varied by making them either square or barred, or round, according to that part of the garment for which the hole is needed.

III. Reasons for usage.—In conjunction with a button, it is a means of fastening together two separate parts of any garment which need a close fit (not necessarily tight) to render the garment comfortable to the wearer and neat in appearance.

IV. Different stages in which a button-hole needs teaching—

(1) The actual stitch upon canvas, without a slit. (Java or single thread, not Penelope.)

(2) The same process only on a folded edge of calico (a band, for instance).

(3) The round and square end, separately, upon canvas.

(4) Combining the two kinds of ends in making a button-hole on canvas—still without a hole—sometimes called a blind button-hole.

(5) Practice in cutting slits, with button-hole scissors, also with ordinary scissors, and if preferred with penknife.

(6) Working the slit in calico, with explanation about commencement, turning round corner, a join (a step often omitted in teaching, but essential), a barred end, and finishing off.

(7) Method of stranding and over-casting.

(8) Cutting and working button-holes in thick material.

Nos. (7) and (8) do not come within the scope of children's work.

Each of the above steps will now be taken in detail.

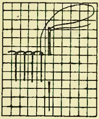
Stage I.—Method of making the stitch on canvas—

(1) Hold canvas right side uppermost, over the first and second fingers, keeping it in its place with the thumb and third and fourth fingers.

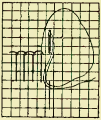
(2) Bring needle through to right side of canvas, about an inch from left edge and an inch down (leave a finger length of cotton, which can be darned in neatly on wrong side when the stitches are all worked, or caught in with the needle as the work proceeds).

(3) Put the cotton up away from worker, *towards the left hand*. Most people do this mechanically, but it is necessary to enforce this in teaching, otherwise one kind of wrong edge will be the result.

(4) Insert the needle into the next space to the right on the canvas, and take up four threads perpendicularly. (Fig. 26.) The needle must always be put in to the *right* of the cotton.



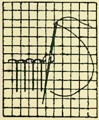
(Fig. 26.) First position of cotton.



(Fig. 27.) Second position of cotton.

(5) While the needle remains placed thus, put the double cotton, that which comes from eye of needle, round the point from *left to right*, and draw upwards from worker, inclining to left if anything, as the tendency is for the stitch to slant to the right; the cotton close to the loop may be caught up with the finger and thumb of right hand in pulling the knot home. (Fig. 27.)

(6) Each stitch is made in the same way, *one* thread being left between every time, as this allows room for the little knot which forms the edge and so keeps the stitch upright.

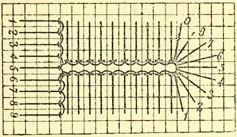


(Fig. 28.)

Another mode of working the button-hole stitch is as follows:—Adopt Nos. 1, 2, 3, and 4 as described above; then draw cotton through till a small loop remains; catch the needle in this loop from the back, *i.e.*, from the under part, and draw upwards. (Fig. 28.) Many people consider this the easier method. It is preferable to *teach* the former, and introduce the second way when proficiency is gained. The latter is decidedly a successful way of using up a small end of cotton, and perhaps is rather quicker when the eye is trained just to leave the loop a sufficient size, but with a child this seems the difficulty. Each teacher, however, must decide for herself which method she prefers and definitely teach it, not combining the two methods in a short space of time.

Stage II.—The same process as above on a folded edge.—The band on the gathering exercise affords a suitable place for practice in Standard IV. work. The edge to be button-holed should be held firmly between the left thumb and forefinger, *the thumb nail being kept just below the place where the needle will be inserted*; the left forefinger should be slightly bent towards the chest, and the right arm must be kept well up from the side, as this enables more tension to be kept upon the thread. The end of cotton can be slipped along the fold of material, and brought out exactly at the edge; the stitches will be worked over the end of cotton, thus securing it. The aim at this stage should be to produce regular and even knots, as firm as a piece of wire, with the stitches all uniform in depth and at right angles to the edge.

Stages III and IV.—Round end on canvas.—This may be worked in three ways:—(1.) With a knotted edge as for ordinary button-holing. (2.) With a twist of cotton at edge, formed by putting cotton from *right to left*—just the reverse position to the proper stitch, hence it is not wise to adopt this method in Standard V., as confusion may arise. (3.) Simple over-casting, which is described below. The latter method is usually adopted. The round end is often called the "eyelet-hole end," as it is worked after the manner of an eyelet-hole. The round end of button-hole should *always* be placed to the end of band, as it gives room for that part of the button which is taken up in the fastening. (Fig. 29) shows the method of working. Completely finish the first side—the material must be gradually turned round as corner proceeds. In detail it may be described as follows:—In order to work round to the other side, and form a semi-circle, nine stitches are necessary (three on the slant, three on the straight, and three on the slant again), each of which is worked into the same hole.



(Fig. 29.) Button-hole complete.

First stitch: Needle to be put in as though another stitch were needed for first side, but without making a knot, merely over-casting.

Second stitch: Insert into same hole, and bring needle out one thread to the right and one thread farther round towards making semi-circle.

Third stitch: Same as second.

Fourth, fifth and sixth stitches: Insert into the same hole; these three stitches are worked straight, one above each other; the fifth stitch should be on a line with the supposed slit.

Seventh, eighth and ninth stitches: Will correspond with third, second and first, and so complete the semi-circle.

When the needle is inserted for the ninth stitch the cotton should be four threads below edge. This is clearly in the wrong place for working the second side of button-hole, but put the cotton up away to left hand, and work as for the ordinary stitch with a knot at edge, which will complete the ninth stitch of round end, and at the same time form the first stitch of second side. If the round end is worked with knots, not more than five stitches can be formed well, *e.g.*, two slanting, one straight, two slanting.

Square, barred, or braced end.—This end enables the hole to be kept partially closed when over button; it prevents the material from splitting, and gives a neat general finish. As nine spaces are available on the canvas, so nine stitches are worked here. When the last stitch of second side is completed, catch up the knot of the first stitch that was made (this will help to draw the slit together when a cut button-hole has to be worked), and bring needle out in the *same hole* as if making the last stitch of second side. To form the first stitch of square end, put needle into the same space as the thread comes from, and form the knots (which will be turned towards the hole) as for the ordinary stitch. The fifth stitch will be on a line with the supposed slit, and the ninth stitch will end where the first stitch of the first side began; pass needle to wrong side and neatly finish off.

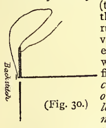
A teacher will have a difficulty, no doubt, in getting all her class to work button-holes accurately to the threads of the canvas, but even if a few members only work it perfectly, they will be the better for having mastered its details. It is well not to spend too much time upon canvas work, but to proceed as soon as possible to the actual cut.

Stage V.—Cutting the slit in calico.—Button-holes are always worked on two thicknesses of material, sometimes three; if a hole is needed on any part of a garment where there is only one thickness, a single piece of material must be felled on wrong side for strength. Button-hole scissors should be used in preference to any others. *The diameter of the button must always regulate the length of the slit.* This length should be slightly (barely an eighth of an inch) longer than the width of the button, so that it does not require an effort to slip out the button. A good plan when cutting a hole in a garment is to place the button just where the hole is needed, and mark a scratch with needle, outside either side of button. A scratched line may guide the whole line of cutting, if preferred, as the material will be held quite flat. The distance the hole is cut from the edge of a band varies; usually it is from one-sixth to three-eighths of an inch. It must be quite free from the turning in of band; the hollow of the button-hole scissors will receive this piece of material while the slit is being cut. Scissors with screw for regulating the length of slit can be bought, but they are not recommended, as the screw soon becomes loose, and so its intended purpose fails. The *perfectly straight and clean cutting of the slit is indispensable*, as without this the whole effect is spoiled, no matter how well it may be worked. There are times when it is necessary to cut a button-hole without button-hole scissors; it is well to know how to use ordinary scissors. The points must be sharp. The material should be doubled exactly in half, and quite straight, so that the folded edge is where the *middle* of hole will come; a small snip should then be made with the scissors, and the material laid out flat again. Just the points of the scissors should be inserted in the small slit made, and the slit extended to its required length by cutting a little at each end of it. Very great care is needed in cutting in this way. Children should be well practised, as button-hole scissors are not to be found in every household, and it is well to school everyone to use the tools they will be likely to meet with. If a penknife be used, it must be very sharp, and the material laid flat on common wood, or a good sized clean coin will answer the purpose, and the direction of the slit marked and cleanly cut. Practice should be given in cutting slit, selvedge way—weft way—and on the cross; also on material representing the front of a shirt or nightgown, as this is more difficult than a band, button-hole scissors being of little use. Left to choice, always cut *selvedge* way of material as for a band. The slit is easier to work and presents a better appearance when done, if it is cut with the warp.

Stage VI.—Method of working in calico.—The cotton used should be about as stout as the threads of the material, and slightly coarser than that in ordinary use on the garment, and sufficient taken to work the entire hole. (About three-quarters of a yard of cotton will work a hole three-quarters of an inch in length). Be sure that the work is held with the slit parallel to worker, so that it is not stretched in the slightest degree.

The round end of button-hole (*i.e.*, the part towards the *end* of the band) must be kept to the *right hand* of worker; therefore hold the button-hole so that the stitch can be started at the *opposite* end to that where the round corner will come, or at that part of the slit which is nearer the middle of the band.

Commencement.—Slip needle down between the folds of material, and bring out a thread or two from the left hand side of slit; secure cotton by a tiny backstitch, bringing needle out at edge of slit; (this backstitch will be covered by the stitches at the end) (Fig. 30); continue working side; as a rule, the quicker the stitches are made, providing they are accurate, the more regular and even the effect; the cotton should be drawn up with a *firm tension*, so that the edge is like a fine piece of wire. *In working round end, pull cotton* **very tightly**; *it is not unusual to see an otherwise good button-hole with these stitches so loose that they may be lifted up with the needle.*



(Fig. 30.)

Joins.—It sometimes happens that the cotton breaks, or that a new piece is necessary; leave a short end ($\frac{1}{6}$-inch) and bring the needle out in the middle of the last knot, while holding the cotton and slit firmly between left thumb and forefinger; flatten the short end towards the right, and work over it with the new cotton.

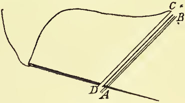
Before working square end it is well to straighten the slit by pulling it in the direction of the hole. This will help to remove any puckering. Sometimes there is a difficulty in getting the regulation number of stitches in the square end, but *never* take the knots beyond the *first* and *last* stitches of the side, if even nine cannot be worked. Be sure stitches go right through the material. Some advise putting a few strands of cotton across the barred end and then working the stitches *through the stuff* (not round the cotton alone). This is optional.

Fastening off.—Pass needle to wrong side, just where last stitch ends, and run along the stitches for a short distance, securing the cotton by a backstitch and slipping between the folds before cutting off. If a button-hole (cut well) has been worked badly, it is possible by using very sharp-pointed scissors to cut away the threads and re-work it, so that it may still be a good hole.

If both ends are required to be square, it is usual to complete the two sides, then work one barred end, and slip the cotton between the folds, bringing it out at the place where it is needed for the other end. Of course, the ends can be done as work proceeds.

Stage VII.—Stranding and over-casting.—It is not usually considered necessary to put strands of cotton around a button-hole to be worked on calico (unless the hole is on the cross), but on thick material and dress stuffs, which are worked with silk twist, this adds to the firmness and raised effect, giving the hole a better appearance, and considerably strengthening it.

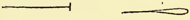
One or two strands are generally sufficient. In a yoke or a shaped band, the strands help to prevent the hole from stretching. The diagram (Fig. 31) shows the position of the strands:—Bring needle



(Fig. 31.)
Stranding a slit.

out at A, about two threads down; put in at B; take up the thickness of material and bring out at C, in at D, and out at edge of slit. This forms one strand. Some people prefer to slightly over-cast the edges with thin silk if material is very likely to fray, or put running stitches close to the edge; this latter plan is often apt to break away material unless the stitches are put first and the hole cut afterwards.

Stage VIII.—Cutting holes on thick material.—If a button has a large shank, similar to those used upon cloth, it is necessary to actually cut away a piece of material in order to make the hole set well over the button. The best way of making this gap is as



(Fig. 32.)

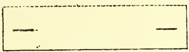
follows:—Cut the slit in the ordinary way, then at round end make a small snip at right angles to slit, carefully slope away the superfluous material, which will leave a widened round end. (Fig. 32.) Knots should be worked all round the edge.

V. Position of holes in garments with regard to appearance and utility.

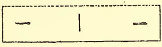
(1) **Chemise and nightgown.**—These garments usually wrap right over left. If a doubt ever exists (and it often does with young people) as to right and left side in overlapping, always place the garment just in the position *it will be in when on the wearer*, and the doubt will be solved. For the above garments one button-hole is usually placed horizontally at end of neck-band, and those for the front should be cut perpendicularly. In each case these holes will be worked with the selvedge. In working button-holes down the front of a garment, where there will be no strain on the ends, *make both ends alike, either round or barred.*

(2) **Shirts.**—Boys' and men's clothing always fastens *left* over *right*, probably from the old custom of carrying the pistol in the breast of the coat—hence the convenience of having garments so fastened. The button-hole at neck of shirt will be cut horizontally, those in the front perpendicularly, and on the *left* or *upper* side. These latter holes usually have braced ends. If studs are used, button-holes will be needed on the under or right side, and in order to keep the stud securely fixed, it is necessary to cut the holes weft way, that is at right angles to the button-holes on the upper side.

(3) **Drawers and petticoats.**—These garments fasten right over left. The button-holes are cut selvedge way. Children's drawers, opening at the sides, and having a back and front band, usually have five button-holes nearly an inch in length, thus (Fig. 33). The *middle button-hole on the front band should have both ends alike.*



BACK BAND



FRONT BAND.

(Fig. 33.)

(4) **Frock bodices and robes** fasten right over left, the holes being cut the weft way of stuff, *i.e.*, against the selvedge. (Of course, presuming that the material has been made up with the selvedge running from neck to waist.) It is not unusual for the centre button-holes in a frock body to be cut parallel with the edge, but they will then have a tendency to gape open, unless the garment is loose-fitting.

VI. Application of the stitch for other purposes.

(1) **Mending kid gloves.**—Work the ordinary button-hole stitch all round the raw edge of hole, then sew the knots of the stitch together on the right side. Use silk that matches the glove in colour, and the mend will be successful. This plan is very effectual when a glove tears at the gusset of the thumb; or a piece of kid may be put under the hole and the raw edge of glove button-holed to it. (A proper glove-needle, triangular in the shank, is recommended.)

(2) **Tape ends.**—If tape is narrow, the ends are often button-holed for neatness, as hemming would be clumsy.

(3) **Openings in garments.**—When one part of a garment is wrapped over the other, as in a placket-hole of a petticoat, front of chemise, &c., it often happens that raw edges are seen on the wrong side; these may be neatened by button-holing.

VII. Faults often met with are :—

(1) Badly cut hole; out of proportion to size of button, or cut the wrong way of stuff as required for the garment.

(2) Wrong commencement (a common error is to put the needle in 4 threads deep in starting, and so a half-completed double stitch is formed).

(3) Incorrect edge to the stitch (a twist instead of a knot)—stitches not uniform in depth, and failing to bind both edges of material.

(4) Cotton not pulled sufficiently tight or left too loose.

(5) Ends untidy—looseness of round end—braced end at wrong corner.

(6) General lack of style in execution through want of practice and deficiency of skill with the fingers.

VIII. Remarks.—Students are advised to practise time tests in this stitch. A good button-hole should be cut and worked in 8 to 10 minutes. This will necessitate confining the attention closely to the work for the time being, which is the surest road to obtain that "knack" so essential to skilfulness and good style.

XI. BUTTONS.

I. Remarks.—In fastening on a button, whether it may be linen, pearl, or metal of any kind, two essentials must be kept in view, whatever method of attachment is chosen, viz., *neatness* and *strength*.

A paper band, with a different coloured paper to represent buttons, and suitable thread are excellent means of demonstrating this lesson.

Linen buttons.—These can be bought in all sizes, known in the trade by "lines," *e.g.*, 10 lines, the smallest size made, and 36, the largest. Size 26 is about as large as a threepenny piece. Buttons covered with 6-fold linen are the best quality. Buttons are usually attached to a card by a stitch of cotton, which is rarely in the centre, and although a mark is left by the attachment, it cannot be taken as a guide to secure uniformity of stitches in putting on the button. Linen buttons are put upon articles which are mangled, as the flat button passes through the pressing for some time without breaking. *Unpierced* buttons are recommended. Buttons should *always* be sewn on double material, *e.g.*, a hem, fold, or band. If it be necessary to attach a button to single stuff, fell a piece of material on wrong side to give strength, or the button will soon come away, bringing material with it.

II. Commencement.—When the position of button is marked—which is best found by lapping over the garment, as it is intended to be when in use, passing the needle through the end of the buttonhole which is to receive the button, and then carefully lifting the hole from the needle—secure the cotton on right side by a few backstitches, which will come under the button, and so be hidden. A knot is unnecessary and untidy.

III. Different methods of putting on a button. (Fig. 34.)

(1) **A ring or circle of stitching.**—This is a very common method, and has the advantage of being a very secure one, as it thoroughly tests the quality of the button. Various means are adopted to assist in making the circle—pricking a ring with a needle, faintly marking a circle with a pencil. A good plan is to press the round part of a key upon the linen. Buttons can be bought with a circular impression in the centre. The two latter methods, of course, are inconvenient for school use. The ring must not occupy more than *one-third* of the diameter of the button; slightly less is preferable. A Fourth Standard child will need to be shown the way a button is "stabbed" for the purpose of stitching it, also when passing the needle from the wrong side of material up through the button, just to let the point of needle show, in order that it may be seen whether it is in the right place to make the stitches continuous.

(2) **A star**, of the same proportion as the ring of stitching, is suitable for small buttons. It consists of stitches radiating from the centre. To judge the number of stitches needed, it is well to bring needle out at centre, and make stitches representing N.S.E.W., and then subdivide these divisions according to size of button. By this method a star can be formed on the wrong side as well as right. This star may be stitched if thought desirable, or the threads may cross at the centre instead of piercing the button.

(3) **Two parallel rows of stitching** *on a line with the button-hole slit* is a very secure way of attaching a button, and should be more often adopted than it is, especially in schools, as children's rings frequently contain angles. The ends of the lines of stitching should not reach quite to the metal rim of the button. An oblong would be similar.

(4) **Stitching in the shape of an ellipse** has much to recommend it.

(5) **Two** loops worked on the button, as for a hook, is a pretty and an ornamental way, but only suitable where very little strain is brought to bear upon the button, *e.g.*, pillow-cases, muslin frocks, fancy pinafores, &c.

(6) **A** stitched cross is preferred by many.

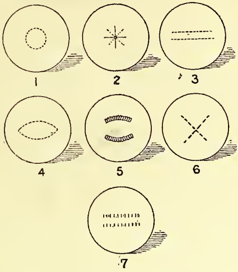
(7) **Small upright stitches on a line with button-hole**—This is similar to No. 3, only the stitches are perpendicularly side by side, instead of being in a line.

IV. Fastening off.—Whichever of the above methods has been chosen—to finish, pass needle *between* the button and the material, and wind the cotton round four or five times, to form a "shank." Be careful not to do this too tightly, so as to cause the material to be strained and dented on the wrong side, but with just sufficient tension to fulfil its purpose, viz., to keep from friction the stitches which have secured the button, and to make it set up from the band and so assist the buttoning and at the same time strengthening.

This process of winding cotton to form a neck is called "stemming." When this is finished pass needle to wrong side, make a backstitch, slip between fold, and cut cotton.

Pearl buttons.—These are pierced with four holes, through which the cotton is passed three or four times, to form either a square on the right side or a cross. The same plan would be adopted for commencement, stemming, and finishing off, as for a linen button. Articles for ironing only, such as muslin frocks, pinafores, and flannel shirts, have pearl buttons.

V. Criticism.—Whichever method of sewing on a button is adopted, it must be suitable to the garment, and the stitches strong and regular. They should not be too near the metal rim, so as to cause the button-hole to gape, nor too near the centre to render the sewing insecure. The wrong side of material must be neat and the fastening firm. The button should be stemmed, and the attaching stitches neither too tight nor too loose.



(Fig. 34.) Illustration of the above methods.

The dotted lines represent stitches of stitching, therefore in working, every stitch must touch the last, *but it is hardly possible to show this in a drawing.*

XII. TUCK-RUNNING.

I. Definition.—A tuck is a fold of material of any depth which is secured in place by a line of stitches. Tucks are worked either *selvedge* or *weft* way of the material, according to that part of the garment upon which they are needed, *e.g.*, in chemises and nightgowns they are worked *with the selvedge*; for drawers, petticoats and skirts of frocks, *weft way or across the selvedge*. If asked at an examination to show tucking as for any of the above garments, the first thought must be to determine the correct way of the material to represent the work.

II. Use of tucks.—Tucks have a two-fold use.

(1.) **Ornamentation.**—This is undoubtedly their primary use, and to serve this purpose they are placed in the fronts of chemises and nightgowns (they then take the place of gathers and so dispose of the extra fulness), at the bottom of frocks, petticoats and drawers; they are sometimes worked on sleeves in the place of gathers at the wrist, and occasionally upon the front side of the band of a garment; babies' robes and fancy muslin frocks are often tucked from waist to hem.

(2) **For shortening or lengthening purposes.**—This particularly applies to children's clothing, as tucks may be let down, or others run, to suit the height of the individual wearer. A short garment may be lengthened by adding more material at the bottom, and concealing the join beneath a tuck. Flannel shrinks in washing, and although it may be necessary to put several tucks in a new flannel petticoat, one or more of these will no doubt require letting down before the garment has been washed many times. Some people prefer only to tack tucks firmly in a *new* petticoat, and to run them after the first washing; this would do for home purposes, but not for a specimen garment.

III. Width of tucks and arrangement.—This will vary with different garments, and in the matter of arrangement a variety of choice may be exercised, providing discretion be used.

The following are merely suggestions:—

(1) **Chemises and nightgowns,** $\frac{1}{6}$ to $\frac{1}{4}$-inch.

(2) **Drawers,** $\frac{1}{4}$ to $\frac{1}{2}$, according to the amount of material cut straight for leg, as tucks should cease at the curve of the leg.

(3) **Flannel petticoats,** 1 to 1½ inches.

(4) **Frocks,** ¼ to 1 inch.

(5) **Babies' mull muslin frocks,** ⅛ to ⅙-inch.

Tucks in a frock or petticoat are usually regulated by the width of the hem at the bottom, the tucks being narrower than the hem. Each tuck graduating in size looks pretty.

In fronts of garments tucks are often arranged in groups with a space between, in which feather-stitching is sometimes worked; groups of three and a space, or two small and a wider one, are different ways of arranging. In frocks and robes, tucks are generally worked in sets of 3, 5 or 7; an uneven number is preferred.

Tuck in fronts of garments should face towards the centre, and graduate in length from the front opening to the side; the side tucks are sometimes very short if intended for a stout person.

Care must be taken in fixing, that the corresponding tuck on the other side of opening is exactly the same length as the one it is to match, as there is a tendency to make the left-hand tucks (those which are worked from the middle of the garment upwards) shorter, unless extra care is taken in measuring.

IV. Space between tucks.—The rules are usually the following:—

(1) For narrow tucks, ⅛ to ¼ inch, the space between each (*i.e.*, from the *line of running* to the *edge* of the next tuck) is usually the depth of the tuck.

(2) For ¼ to 1 inch tucks, the spacing should be about *half* the width of tuck.

In every case the edge of the tuck must always *quite clear* the line of running, as overlapping is not allowable, looking both clumsy and ugly.

V. Preparation of material.—A tuck always occupies *three times* its width, viz.:—

(1) The right side of the tuck itself.

(2) The under part.

(These two portions are secured by a line of stitches to form the fold.)

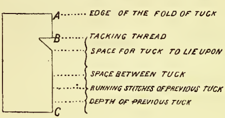
(3) This fold requires the same width of space to lie upon.

To calculate the quantity of material needed in cutting out to allow for tucks, reckon each tuck will require material *twice* its depth, *e.g.*, a ¼-inch tuck will require ½-inch of extra material. Therefore to admit three tucks half an inch wide in a pair of drawers, will require three inches of calico in addition to the hem and turnings.

VI. Direction for fixing.—Prepare thus: Decide upon width of tuck, and cut a piece of card, or stiff paper, twice the depth of tuck, + the space to be left between each tuck, + the depth of previous tuck (or if the first tuck of a set, the depth of hem below instead, the card can then be cut to proper size after the first tuck is worked). Make a notch the depth of the tuck, A B in diagram

(Fig. 35), which illustrates a card prepared for ¼-inch tucks; the notch will be a guide for the tacking thread—A. the fold of tuck to be worked—C. the edge of the tuck below, or hem, as the case may be.

MEASURING CARD FOR ¼ INCH TUCKS

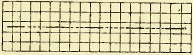


(Fig. 35.)

Fold material so that the wrong sides touch, and place the lower edge of the card to the bottom of hem or fold of previous tuck; arrange the material so that the edge of tuck corresponds with upper edge of card, or A C. The notch shows the line for tacking. Make long stitches on the under side to guide the running, or a crease pressed down and then lifted up is a help; in no case should a thread be drawn for the purpose of keeping the stitch straight. The running stitches should come just above the line of tacking. With a little practice the card may be dispensed with, and the depth measured from the fold of the lower edge of the tuck to the top of the tuck to be worked, by folding a convenient portion of the previous tucking at right angles to the direction in which the tucks are run, and letting this serve as a guide for measuring instead of the card.

VII. Rule for the running stitch.—Tucks are usually run upon the *under* side, but sometimes upon the upper. The latter method is not to be recommended for strength, although in appearance it looks well.

Commence with a few back stitches. The running stitch, as worked on canvas, is illustrated by taking up two threads and missing two threads (Fig. 36); this is often modified by three and three, and unless the material is very thin it is impossible to keep this proportion; but in order to make the stitch appear regular on the reverse side, it is necessary to take up a little more material *on* the needle than is passed *over*. If the material is of a loose texture, two or three stitches may be taken on the needle at a time; but, if it is the least degree harsh, running is almost a stitch-for-stitch process. Every stitch must show through clearly on the reverse side, or the work will be insecure if the stitches are split.

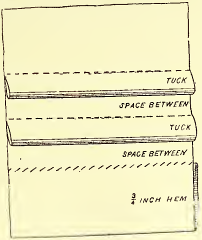


(Fig. 36.) Running on Canvas.

Joins.—Fasten off the old cotton by a backstitch, and slip the needle between fold of material; begin with new cotton by running for at least half an inch *exactly* over the old stitches, secure by a back-stitch in front of the old cotton. It is impossible for this to come unfastened, and the join is very strong and neat.

When running tucks for chemise or nightgown, on right-hand side of garment—fasten off by making two back-stitches—turn work round and run back over the stitches already worked for half an inch. For left-hand side of garment, *i.e.*, those tucks which are worked from the centre upwards, begin by half-inch of running towards the centre; make back-stitches and run exactly over the same stitches again. This makes a very strong fastening for the lower part of tucks, and will resist any pulling.

When the first tuck is complete, it must be *well flattened* down with the thumb and finger, and the card cut so that its lower part shows the measurement of the depth of the tuck just worked, instead of the hem. (Fig. 37) shows a specimen of tucking. The running stitches should match the hemming stitches in point of size.



(Fig. 37.)

VIII. Other methods of working tucks.—Tucks are sometimes hemmed. This is suitable for the Lower Standards, where running is not taught, as it forms a pretty ornament to an otherwise plain garment. Children might be led to think it a privilege to be allowed to ornament their work in this way. Hemmed tucks need special care in fixing in order to keep them even. Two rows of tacking are usually necessary (1) as for ordinary running on the right side of the material (2) a fixing thread on the wrong side just above where the hemming stitches will come. Of course, this is for children's needs. A skilful fixer might manage with only one line of tacking.

Stitched tucks (by hand) are occasionally seen, although teachers who countenance this kind of thing, say stitching is easy and children like to do it. It seems a very unnecessary ornament, and upon drawers and skirts of garments it is quite useless, the intended purpose of the tuck fails, as it cannot easily be let down, and a girl who is capable of stitching so quickly and well, as to be able to work an endless number of tucks, could surely spend her talent more profitably upon the higher branches of needlework.

IX. Points for criticism are :—

(1) Tucks fixed unevenly, being too far apart to look well, or too close so that they overlap each other—width unsuitable to garment.

(2) Running on the upper side of tuck, whereas the under is preferable.

(3) Threads drawn for running.

(4) Stitches not showing through clearly and regularly.

(Test by gently pulling material while looking at the wrong side of garment—insecure work is soon detected.)

(5) Cotton drawn too tightly, making tucks look puckered.

(6) Insecure fastenings, especially at ends of perpendicular tucks.

XIII. MARKING.

I. Introduction.—The art of marking was brought to perfection many years ago, and if our great grandmothers could but see the meagre attempts made by us now-a-days, I fancy they would have some contempt for the system by which our needlework abilities are tested.

Who does not remember having seen—the "yellow with age" sampler, often in a frame, showing the alphabet, capital and small, in Latin, Gothic, and Old English script, the figures, an appropriate text or verse, sundry ornithological specimens, a few representations of animals, trees and flowers, generally a cross and crown, with the name and age of worker, and the date of the year to conclude the achievement—all being surmounted by a handsome border?

These samplers were considered a certain test of proficiency in needlework and proof of skill, and they were treasured with such care, that many worked during the eighteenth century are even now in a good state of preservation.

A sampler, dated 1761, was exhibited recently at an exhibition. The verse was, to say the least, quaint. It read as follows:—

Hannah White is my name,
And with my needle I worked the same,
That all the world may clearly see
What care my parents took of me.

The utility of all this work, beyond that of cultivating habits of perseverance and neatness, may be questioned, and certainly time and talent may be more profitably employed.

Marking, even in its simplest form, has suffered since the invention of marking ink, which, although an expeditious method, does not look so well as marking with thread, neither is it suitable to every kind of material. Machine-embroidered letters can also be bought in almost any combination, but although people consider marking an unnecessary stitch, there are still many households in which linen and underclothing are marked with cotton; certainly the cost is comparatively *nil*, and the articles are rendered ornamental, tidy, and finished, and have the advantage of being easily discerned by the laundress or distinguished from clothing belonging to other members of the family. Marking is usually a very popular stitch with children, and one in which great interest is shown. In the present Code it is not taught, as the increased requirements in cutting out demand more time for class teaching, and marking is a stitch that can be dispensed with; however,—as it is sometimes asked for at the examination of students, a description of the stitch is given.

II. Material used.—Marking should be taught upon Java, or single thread canvas (not Penelope); when proficiency is gained,—coarse marking linen or Saxony cloth may be used, and finally flannel, calico, and finer linen. Marking cotton can be bought either in skeins or reels, in numbers varying from 40 to 120. It is dyed previous to twisting, hence it is "ingrain." Turkey-red is the common colour. This contrasts well with white material. Blue marking cotton can also be bought. Any colour is suitable for practice. A demonstration frame is an excellent means of illustrating the marking stitches to a class.

III. Varieties of marking :—

(1) The ordinary cross-stitch, producing a cross on the right side, and an irregular stitch on the wrong. This is the simplest kind of marking.
(2) "True" marking, in which both right and wrong sides form a cross.
(3) "Eyelet-hole," in which each stitch is worked to its centre.
(4) "Queen," or Spanish stitch, consisting of a square on the right side, and a cross on the wrong.
(5) "Stitching" or "chain-stitching" a pencilled letter.

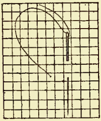
Each of the above will be dealt with in detail.

(1) **Description of cross-stitch marking.**—This is generally worked from left to right, and each stitch crosses a square of two threads.

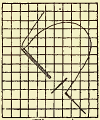
Commencement.—Bring needle through, between the threads, from the underneath to the right side, leaving a finger-length of cotton, which can be darned in when work is finished.

The stitch.

(1) Count two threads to the right, and take up two threads perpendicularly, bringing the *point of needle out on a line with the cotton*. This forms the first diagonal or under portion of the stitch. (Fig. 38.)



(Fig. 38.)



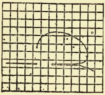
(Fig. 39.)

(2) Insert the needle at the top left-hand corner, two threads *above* starting point, and bring needle out at the left-hand corner of the place needed for the next stitch. (Fig. 39.)

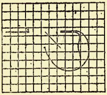
The upper portion of the cross has now been made, the thread slanting from *right to left*. Each stitch is worked in the same way.

There are other ways of inserting the needle in order to form the cross-stitch, producing exactly the same result on the right side.

Another method is shown in Figs. 38A and 39A.



(Fig. 38A.)



(Fig 39A.)

It is advisable to work a number of stitches to gain familiarity and speed.

Finish.—Fasten off by running the cotton under the last few stitches on wrong side and cut close. Thread the needle with end left at commencement and treat in the same way. This is a point that must be insisted upon in class-teaching, otherwise good marking is often spoiled by want of attention to the neatness of the wrong side.

For commencement, the end of cotton may be worked in with the first few stitches, if preferred. It is rather more difficult for a child to manage, and requires more practice.

Knots in marking are very hideous, and should not be permitted under any circumstances—they are quite nnnecessary.

The alphabet.—(1.) Capital letters are seven stitches high, consisting of fourteen threads; usually four or five threads are left between each letter.

(2) Every letter must be *complete* by itself; that is to say, a strand of cotton must *not*, upon any account, be passed from one letter to another, and so make a connection on the wrong side, but each letter should be finished off before the next is commenced.

(3) Each stitch should be crossed the same way.

(4) Letters onunderclothing and house linen are usually marked *weft* way of the material, *i.e.*, the selvedge threads running from top to bottom of the letter.

As soon as the stitch is known, the capital letters of the alphabet may be taught.

These must be introduced in a step-wise succession of difficulty, not in alphabetical order, but thus :—

(1) The letter "I" is the simplest, and enters into the formation of several other letters.

(2) E, F, H, L, T, K, M, and N contain portions of "I."

(3) "O" is the easiest of the round letters.

(4) C, G and Q are variations of the circle.

(5) B, D, J, P, R, U, are a combination of "I" and "O."

(6) A, V, W have the same kind of slope.

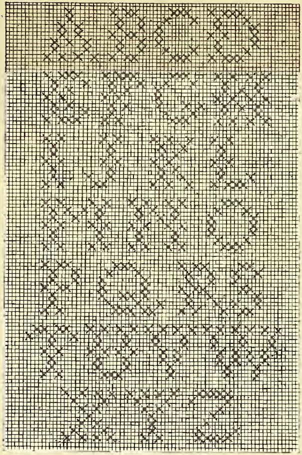
(7) S, X, Y and Z are dissimilar, and must be taught separately.

Excellent practice in marking from memory is afforded by studying the construction of a letter, and reproducing it on paper.

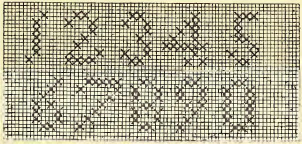
Small letters are five threads high, the tall-small letters generally seven; two threads between each letter are sufficient.

Exactly the same rules as above apply to numerals.

(Figs. 40 and 41) give an illustration of the alphabet and figures.



(Fig. 40.) The Alphabet.



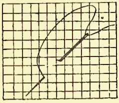
(Fig. 41.) Figures.

(2) " **True** " **marking**.—This stitch was known many years ago as "Brave Bred" stitch. It consists in producing the same appearance on the *wrong* side as the *right*, viz., a cross.

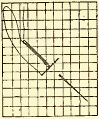
It cannot be called "letter-perfect" on the wrong side, as of course some letters will appear as though shaped backwards, *e.g.*, C, F, G, K, L, &c.

It requires exceptionally *fine* cotton for the stitch, otherwise it is a shapeless mass.

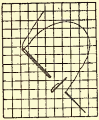
This kind of marking is very little used now-a-days, but as it is sometimes asked for, and if worked properly is exceedingly neat on the wrong side, it is necessary to describe the method of working the stitch.



(Fig. 42.)

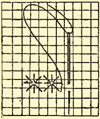


(Fig. 43.)



(Fig. 44.)

Bring needle through to right side, leaving a finger length of cotton; put needle in at the right hand top corner of the square of threads over which the stitch is to be made, and bring the needle out at the bottom left hand corner, exactly where the cotton starts from—this forms a diagonal stitch on both right and wrong sides. (Fig. 42.) The next stitch consists of a *half* stitch taken only as far as the centre of the diagonal (Fig. 43), and if possible underneath the whole cotton, the needle being brought out at either of the other corners which seem most convenient for the next stitch of the letter that is being formed (a little practice and foresight will soon show the suitable position for the needle); make another diagonal stitch as before, which will complete the cross on both right and wrong sides. (Fig. 44.) It will be seen that portions of the stitch are crossed *twice*, hence the necessity of using fine cotton, and to form some letters it is needful to cross even more than twice, in order to bring needle out in place required. The fastening off consists in making a diagonal stitch over one or two stitches already made, and cutting cotton close; treat the thread left at commencement similarly.



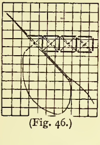
(Fig. 45.)

(3) **Eyelet-hole stitch.** — This consists of eight stitches, each of which is worked to its centre.

The diagram sufficiently illustrates the working (Fig. 45). This stitch would only be suitable on coarse fabric.

(4) **Queen, or Spanish stitch.**—This consists of a square on the right side and a cross on the wrong. It is worked by making a back-stitch above, below, and on either side of a square of threads.

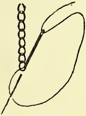
The stitch is formed as follows, and is worked from right to left :—Bring needle through to right side. Count two threads below from where cotton comes out, and bring needle out *diagonally* at *top left* hand corner of square ; put needle in two threads to the right horizontally, and bring out *diagonally* at *bottom left* hand corner; this completes the second side of square. Put needle in two threads to right horizontally, and bring out at *top left* hand corner. This forms the third side. Count two threads below from where cotton comes out, and bring needle out *diagonally* at *top left* hand corner of next square, which will complete the fourth side of the square, and at the same time form the first side of the next stitch (Fig. 46). It will be noticed that each time the needle takes up *diagonal* threads in order to keep the cross on wrong side ; of course portions of the stitch are double. Three sides of the squares at the back are made by every cross, so as to form squares as the marking goes on. The stitch may be varied by producing a cross on the right side and a square on the wrong. Two, three, or four threads may be taken as forming the square, according to the fineness of the thread.


(Fig. 46.)

This stitch is often used for marking blankets, and on coarse material.

(5) **Stitching, or chain-stitching, a pencilled letter.**—It is advisable to faintly mark a script letter, taking care to make good curves, and stitch over the line of pencilling. Leave an end of cotton at commencement, and run at the back of the letter when it is finished.

Chain stitch is worked thus :—Bring needle through to right side, hold cotton down under left thumb ; insert the needle in exactly the same place as the cotton comes out ; take up two threads upon the needle (or a proportionate amount of material), keeping the needle to the *right-hand* side of cotton ; draw *gently* towards worker, which will form the first stitch. Hold cotton under thumb ; put the needle back in the chain just made, and exactly in the same place as cotton comes out, and so on. (Fig. 47.) Fasten off as for stitching. The right side will appear as the links in a chain, or similar to the simple stitch in crochet work, being a loop proceeding from a previously formed loop.


(Fig. 47.)

A chain-stitch sewing machine produces on the wrong side a *fac-simile* of this stitch.

IV. Position of marking on house linen and garments.—Bed, house, and table linen, also kitchen towels, are usually marked at the upper left hand corner thus :—

Name	A. Jones.
No. of articles	12.
Year	—97.

Pocket handkerchiefs are marked at the same corner.

Underclothing at the lower part of front opening.

Stockings at the upper part of knee, the loops of the web representing threads. The shape of the letter is sometimes Swiss darned.

V. Faults met with are—

(1) Inaccurate formation of the stitch and letter.

(2) *Untidy commencement and finish—knots.*

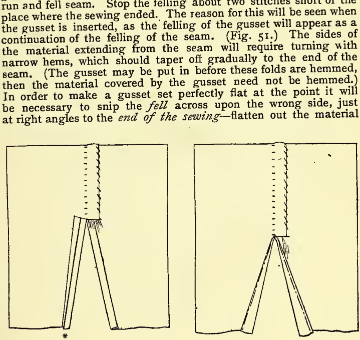
(3) Letters connected on wrong side.

(4) Material puckered, and general appearance untidy.

XIV. A GUSSET.

I. Definition and use.—A gusset is a piece of material inserted into a garment, generally a shirt or drawers, in order to prevent a seam or opening from splitting where there is likely to be any strain, and also to give a neat finish to a garment.

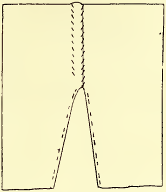
II. Preparation of material.—The seam (either run and fell, or sew and fell) where the gusset is to be inserted, will be the selvedge way of the material (*i.e.*, if the garment has been cut out properly), therefore, for practice purposes, the pieces of stuff representing the garment must be torn *selvedge* way, and joined by a sew and fell or run and fell seam. Stop the felling about two stitches short of the place where the sewing ended. The reason for this will be seen when the gusset is inserted, as the felling of the gusset will appear as a continuation of the felling of the seam. (Fig. 51.) The sides of the material extending from the seam will require turning with narrow hems, which should taper off gradually to the end of the seam. (The gusset may be put in before these folds are hemmed, then the material covered by the gusset need not be hemmed.) In order to make a gusset set perfectly flat at the point it will be necessary to snip the *fell* across upon the wrong side, just at right angles to the *end of the sewing*—flatten out the material



(Fig. 48) (a.) *This line shows the calico, which is cut away.

(b.) Opening prepared as on wrong side.

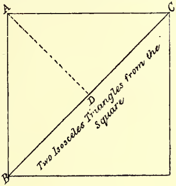
which formed the fell, and gradually slope off the superfluous calico in the shape of a wedge, which will facilitate the turnings of the hems, and enable the gusset to set flatly at point of insertion. All raw edges will be covered by the gusset. The diagrams will illustrate each step. Fig. 48 (a) (b) (c). A teacher should provide herself with a paper or coarse material specimen, upon which to illustrate each portion of the work.



(c.) Opening prepared as on right side.

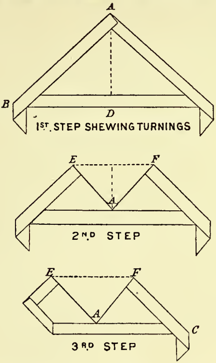
The class might turn a paper gusset preparatory to the calico one.

III. Preparation of gusset.—Gussets are always in pairs, *e.g.*, the wrist, or hip. A square of material is sufficient to make a pair. Hip or side gussets are rather larger than those put into a sleeve. (Fig. 49) shows a square of material, which if cut diagonally, gives two isosceles triangles. The other diagrams illustrate each step in progress. (Fig. 49). A=apex ; B C=base line. Make a crease down the centre, extending from apex to base—A D. Turn a narrow fold, barely $\frac{1}{6}$ inch all round the triangle, base first—press corners. Keep raw edges facing worker ; fold down apex A on to centre



(Fig. 49.)

crease, till it touches the *raw edge* of the turning of base; crease across E F. Turn up corners B C to meet E F exactly (be sure these ends fold down quite flatly) and *cut off* the little corners even with the *other turnings* of the gusset and not at the fold. (Fig. 50.)



(Fig. 50.)

Only the left hand corner is shown as being cut off, the right hand one would be treated similarly.

IV. Directions for Insertion.

(1) Hold right side of garment towards worker with the seam to the *left* hand, and the opening to the *right*.

(2) Place point A of gusset *exactly* to the end of the seaming, hold the edge of garment and gusset firmly in place between thumb and finger.

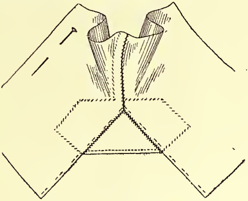
(3) Begin to sew at crease F, make a few strong stitches at A, and sew round to E on the other side—*do not break cotton*—flatten sewing.

(4) Turn to wrong side, and pin perpendicular crease of gusset to middle of the seam; fell all round as far as pin, keeping the *sides true to a right angle, and parallel with the weft and selvedge threads of the material.* This is very

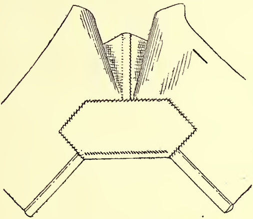
essential. It will be necessary to slightly stretch base in order to make the gusset set flat, as upon this flatness its beauty depends—remove the pin and place it at the corner; stretch the base to match the half already worked, and complete the felling; do not break off the cotton.

(5) Turn work to right side—stitch the folded edge of gusset *close to its edge* (1-10th inch below) to flatten it, and give a general finish.

It will be seen that there is no occasion to make joining of cotton at the corners. (Fig. 51 and 52) show gusset complete on both right and wrong sides.



(Fig. 51.) Gusset complete on right side.



(Fig. 52.) Gusset complete on wrong side.

If a gusset be put into a run and fell seam, the *right* side cf garment and the *right* side of gusset will be held together, so that the wrong side of garment must face worker; the other working is the same.

A gusset of single stuff is sometimes put under the arm of a baby's first shirt. In this case the straight sides are stitched into the arm-hole, and the side on the cross slightly shaped and hemmed round with the other part of the sleeve.

A gusset may be put into the side opening of a child's drawers. In this case the hems at the sides of the vent should be turned to a point. The gusset can then be inserted as described above. The point requires care, as there is no seam at which to place it.

V. Faults for criticism are—

(1) Badly prepared opening into which gusset is to be inserted.

(2) Gusset not geometrical in shape, and unevenly turned.

(3) Gusset clumsily inserted on right side—point not being put to seam, and sides unequally sewn as regards length.

(4) Wrong side irregular in appearance—a larger portion of gusset on one side of seam than on the other—sides not parallel with the threads of the material, so that corners do not form a right angle.

(5) Felling not forming a protection to point on right side caused by gusset being improperly prepared.

(6) Fastenings not secure, and corners untidy.

(7) General appearance not flat.

N.B.—Stitching, seaming, and felling stitches to be criticised as described in those lessons.

VI. Remarks.

A gusset is sometimes made from a square of material, in which case a triangle would appear on the wrong side as well as right. The method described in detail is the more general.

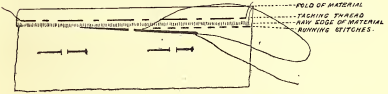
* * *

XV. RUNNING AND FELLING.

I. Remarks.—Running and felling is one method by which two pieces of material are joined together to form a seam. It is considered by some people (although now approved by the Education Department and introduced into the Code) a slovenly way of making a join, and named "scamp work" in consequence; but if well done, and certainly a run-and-fell requires a little care in fixing, it is a quick and suitable way of joining material, especially if loose in texture. It should not be taught until a sew-and-fell seam can be worked well, and certainly not in any Standard below the fifth.

One still occasionally hears of a "stitch-and-fell" seam, but surely a greater waste of good work and valuable time cannot be imagined, as the stitching would be upon the wrong side of the garment.

II. Directions for working a run-and-fell.—Cut off all fluffy edges of calico. Place the two pieces of material together, right sides facing. Keep the back edge $\frac{1}{6}$-inch (narrower if fine material) above the front. Put in a few pins about $\frac{1}{2}$-inch down, to hold material firmly. Turn down the back edge *over* the front, and tack in place. (Fig. 53.) The running stitches should come just below the raw edge, which will serve as a guide for keeping the stitches straight, or a fold may be turned down and creased the required depth, then raised, and the stitches kept in the crease.



(Fig. 53.) Running in progress.

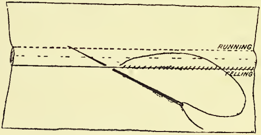
III. Rule for running.—Commence with a few back-stitches. The running stitch as worked on canvas is illustrated by taking up two threads and missing two. This is often modified by three and three, and unless the material be very thin it is impossible to keep this proportion, but in order to make the stitch appear regular on the reverse side, it is necessary to take up a little more material *upon* the needle than is passed *over*. If the material is of loose texture, two or three stitches may be taken on the needle at a time, but if it is in the least harsh, running is almost a stitch by stitch process. *Every* stitch must show through clearly on the reverse side, or the work will be insecure if the stitches are split.

Joins.—Fasten off the old cotton by a back-stitch, and slip needle between fold of material; begin with new cotton by running for at least half an inch exactly over the old stitches, and secure by a back-stitch in front of the old cotton. It is impossible for this to come unfastened, and the join is very strong and neat.

IV. Preparation for the fell.—When the running is complete, do not remove the tackings which have secured the fold, as they will assist in keeping the fell even.

Open the double material so that the hand can be placed along the right side of garment, and tack down the fell, perfectly flat and even, as upon this fixing will depend the "set" of the fell on the right side, which must not show the slightest fulness on the single stuff. It is in this particular that a run-and-fell presents a difficulty.

A skilled needlewoman would be able to dispense with the additional tacking of the fell, but for beginners it is essential.



(Fig. 54.)

The fell is then hemmed down in the ordinary way (Fig. 54); greater care is needed, however, as the material is more cumbersome to manage than an ordinary hem, and requires more skill in holding.

The running and felling-stitches should match in point of size.

Another method of fixing a run-and-fell is to make a fold nearly ⅙-inch on the back edge of material, and then place the front edge so that it just clears the fold; the running is then worked the required depth. This method sometimes results in the raw edge showing through on right side like a little fringe.

V. Points for criticism—

(1) Badly prepared fell, the depth being unsuitable to the garment.

(2) Irregular, split, and poorly-shaped stitches in running and felling.

(3) Fastenings insecure and untidy.

(4) A puckered and clumsy appearance on right side.

XVI. FEATHER, CORAL, OR TREE STITCH.

I. Introduction.—This stitch is probably so named from its resemblance to the barbs of a feather, the branches of coral, or the twigs of a tree.

It is really a branch of fancy work, but in plain needlework it is used in place of stitching, and is a great saving of time, labour, and eyesight; but it should not be put upon a garment in which the elementary stitches, such as hemming, sewing, gathering, &c., are not creditably worked, and not then unless the ornamenting stitch can be done regularly and uniformly, it is in this particular feature that its beauty consists.

II. Use.—In plain needlework this stitch is used entirely for ornamentation upon neckbands, wristbands, fronts of garments, &c.

In fancy work it is one of the fundamental stitches.

III. Materials for working.—The stitch should be taught upon canvas, similar to that employed for teaching herring-boning. Various kinds of threads are used for the stitch, each of which has advantages.

(1) **Crochet cotton** is generally used, and always looks well. It is very strong wearing, but, unfortunately, it often becomes a bad colour in washing.

(2) **Flax, or flourishing thread**, such as is used for mending house and table linen.

This is very suitable upon fine material, mull muslin, cambric, &c., as the thread is soft and glossy, and crochet cotton would be more harsh looking.

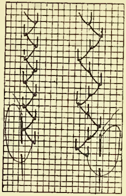
For garments subjected to hard wear, flax thread is not to be recommended, as it soon breaks with hard rubbing in frequent washing, although it keeps its colour well.

(3) **Embroidery cotton**, to be had in several sizes, is another suitable thread for a material that is not glossy. It is exceedingly soft to work with, looks well, and wears admirably.

(4) **Wool, yarn, or silk**, may be used for flannel or stuff garments. Flannel silk keeps its colour in washing and is unshrinkable. Filoselle, crewel silk, and flax thread, are sometimes used upon flannel. Andalusian wool, or best quality fingering yarn, is also recommended.

A crewel or embroidery needle should be used.

IV. Description of the stitch upon canvas.—(Fig. 55.)—The stitches are worked alternately right and left of an imaginary centre line. Hold the work over the first and second fingers as for hemming.



(Fig. 55.) Coral stitch on canvas.

To commence.—Bring needle through to right side leaving a finger length of cotton hanging, which can be darned in when work is finished—bend the thread round to the right hand making half a loop—keep the thumb upon it—count two threads to the right from where cotton comes out—insert the needle, and take up two straight threads, still keeping the thumb firmly on the cotton, and taking care that the needle is *above* the thread which forms the loop; draw through gently towards worker, but not loosing the thumb till the cotton is almost home; bend the thread to the left making half a loop as before—insert the needle two threads to the left from the place where the cotton comes out, and take up two straight threads; draw out as on the other side; continue working thus, the stitches radiating alternately right and left. To fasten off, pass needle to wrong side, and run along under the stitches already worked; thread needle with the end left at commencement, and treat in the same way.

This is known as "single" feather-stitching. The "double" is worked in the same manner, only two stitches to the right and left alternately; sometimes three to left and three to right are chosen. The needle for the new stitch must always be put in *on a line* with the bottom of the preceding one.

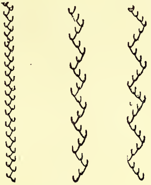
V. The stitch upon calico.—(Fig. 56.)—For ornamenting a band of any kind, coral or feather-stitch will be worked upon double material, and the stitches should show through clearly on the wrong side. It is unnecessary to count threads upon material, even distances and proper proportions must be gauged by the eye. If the material is fine, more than two threads, say $\frac{1}{10}$ or $\frac{1}{12}$ inch, may be taken on the needle, but the same uniformity must be kept throughout the work.

(A large amount of licence should not be taken in this respect, otherwise the appearance of the stitch is coarse and common looking, and takes from the value of the work rather than adding to the beauty of the garment.) It is often a help towards keeping the stitch straight, if a line of tacking be put round the band where the work is to be, or two creases are also a guide to ensure evenness.

The tendency is to *increase* the size of the stitch as the work proceeds; this must be guarded against, *as compactness is essential.*

It is almost impossible to work feather-stitching too close or too small for good style.

In ornamenting the front of any garment, the feather-stitching should always be started *from the neck* and *worked downwards.*



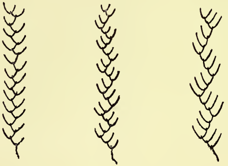
(Fig. 56.)

To commence.—If on double material the thread may be slipped between the fold, and the ordinary stitches can then be worked over this end to secure it. If on single material the stitch may be begun with a back-stitch, or the end worked in with the first few stitches; but, perhaps, a neater method is to leave an end as on canvas, cut it nearly close (about $\frac{3}{8}$-inch), and sew it over at the back of the other stitches with fine sewing cotton.

To join.—If on double material, pass needle to wrong side just where stitch ended, run a stitch or two, and then slip between folds; cut off, do not *break* thread. The new thread may be treated as for commencement, and the needle brought out *exactly* where the last stitch ended. The join is then almost invisible on the right side, and firm and neat on the wrong.

If on single stuff the ends may be sewn over at the back as described above, or the thread run in and out under the stitches at the back. *Knots should never be made* as they are unnecessary and ugly, and show a great lack of nicety and general finish. For turning a corner, as from a neckband to the front of a garment, if intending to work to the right hand, make the *last* stitch of the old side and *first* stitch of the new on the right hand of the centre line ; if turning to the left hand make the *last* and *first* stitch on the *left* hand of the centre.

Always work the stitch moderately loose, as the thread often shrinks in the washing and if drawn in the least degree tightly is impoverished (especially note this when working with wool or silk), and the full effect of the stitch is spoilt. When the principles of working are known, the appearance of the stitch is improved if the needle be pointed *slightly* towards the centre when working alternately right and left. The general effect is less angular, therefore more pleasing to the eye. There are many ways of making varieties of patterns in this stitch which will suggest themselves to an earnest worker. A few illustrations are given. (Fig. 57.)



(Fig 57.)

VI. Remarks.—A distinction (with but a slight difference) is sometimes drawn between "feather" stitch and "coral" stitch, If worked as represented on canvas, it is known as "coral" stitch. but as "feather-stitching" if a slanting stitch be produced.

VII. Points for criticism are—

(1) The use of unsuitable material for working purposes.

(2) The stitch wrongly applied, and in an unfit place on the garment.

(3) Incorrect method of forming the stitch.

(4) Size of stitches out of proportion to the threads of the material.

(5) Irregular and uneven distances between the stitches.

(6) Insecure, untidy, and clumsy joins—**knots.**

(7) Thread drawn too tightly, and so producing a puckered appearance.

(8) General want of uniformity and compactness, owing to lack of practice.

XVII. KNOTTING OR SEEDING.

I. Introduction.—In plain needlework knotting is entirely an ornamental stitch. It is used in conjunction with coral stitch, as a means of decorating any garment, especially baby linen. It is a stitch largely and effectively used in embroidery, for filling in the seed vessels in the centres of flowers, also for working clusters of berries. In fancy work the stitches are called French knots, and are worked in a slightly different way, but the same in principle.

The same materials as recommended for feather-stitching would be suitable for knotting. If a large knot be needed, it is advisable to use coarser thread, or to double the strands, as this will give a firmer knot than would be made by twisting the thread several times around the needle.

II. Method of forming the knot—

(1) Hold material as for hemming.

(2) Bring the needle through to the right side.

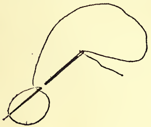
(3) Make a loop (close to where the cotton comes out) from left to right, about as big as a threepenny piece. Let the long end of cotton go to the left. Hold the point of the thumb upon the loop.

(4) Take up a small piece of material horizontally (two threads on canvas, say $\frac{1}{16}$ inch on material), bringing the needle out where the cotton came from in the first instance. (Fig. 58.)

(5) Pass the needle over the long end of cotton, and lift the loop up on the needle, either from the centre or from underneath.

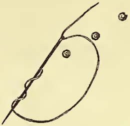
(6) Draw through rather smartly upwards, towards the ceiling.

(7) Insert the needle again in the place where the stitch was made, and bring out just in front of the place where the next knot is wanted.



(Fig. 58.)

French knot.—(Fig. 59).—This kind of knot is sometimes used in plain needlework, and as it is very simple, it is given here. It is not such a flat knot as the one already described, hence it is not so suitable for plain garments.



(Fig. 59.)

(1) Hold the cotton down rather loosely under the left thumb.

(2) Twist the needle twice (three or four times for very large knots) round the cotton, pointing the needle to the chest.

(3) Still keeping the thumb upon the cotton, turn the needle round, and put it back through the material *just behind* where it came out.

(4) Draw the cotton through the twists, but do not loose the thumb hold, till the knot is almost home, as this helps to regulate the proper degree of tightness.

(5) Bring the needle through to the right side at the place intended for the next knot.

III. Knots upon material.—Knots are sometimes worked in conjunction with double coral stitch, the knots being put in the interspaces between the vandykes of the stitches. Of course, knotting may be used alone as an ornament, according to the discretion of the worker and the character of the work in hand. If working upon double material, always slip the needle between the fold when passing from stitch to stitch. This makes the wrong side much neater, and is stronger for washing purposes. Care must be taken not to pucker the material. The ends of cotton may be fastened as described in feather stitching.

IV. Remarks.—Good knotting consists of firm, even knots, at regularly placed distances apart, suitable in size to the material, neat on the wrong side, and absence of any puckering.

XVIII. WHIPPING AND SETTING ON A FRILL.

I. Introduction.—Hand-made frilling has fallen into disuse of late years, probably because so many kinds of patent trimmings have been introduced, which answer the purpose equally as well for ornament, and take considerably less time to set on.

In the days of our grandmothers, education in needlework would not have been considered complete unless proficiency had been attained in whipping, which was so much approved of in those times; but there are many good needlewomen, who still think highly of whipping as testing the skill of a seamstress, and everyone will allow that to hem, whip, and set on a frill, requires a dexterity with the fingers, not possessed by everyone, and it certainly is the stitch *par excellence* as a test of finger skill. It is not that the "whip" and setting-on stitch are difficult, but that fine material in a small quantity has to be dealt with, and this requires a good amount of fingering. There are certainly quicker ways of trimming garments, but the "whip" stitch may be put to other uses than that of trimming underclothing.

II. Material necessary.—Mull muslin, nainsook, or cambric are the best kinds of material to use for ornamenting calico or long-cloths. The above materials vary in width from 36 to 48 inches, and can be bought from 4¾d. to 1s. 6¾d. a yard. A ¼-yard will make a quantity of frilling sufficient for two or three garments, so the cost is trifling; it is the time spent in making the frill that gives to it its value as a trimming. The cheaper qualities will not tear without dragging the threads, and are not to be recommended for frills.

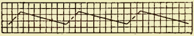
III. Preparation of material.—Frilling *must be torn weft* way of the stuff, *i.e.*, with the selvedge the short way or the depth of the frill, else it cannot easily be rolled for whipping, and sets very badly when put on to garments. It is better to tear the frills the required width, and cut off the fluffy edge before hemming or whipping (some recommend drawing a thread in order to keep straight, but this seems a rather tedious process and quite unnecessary). The width of frill is a matter of taste; slightly less than ¾-inch *when complete*, is a suitable width. This will necessitate cutting the frill nearly an inch. Frills, from three to four inches, are often used now as trimming for underclothing. These frills are intended to fall down over the garment. A narrow frill would stand upright.

The proportion of frilling to band is usually *twice* the length, sometimes a little more is allowed to give extra fulness (say 2¼ times length of band). If more frilling is needed than the width of muslin will allow, the garment must be measured and the required length must be joined, *before* hemming or whipping, either by sewing selvedges (which are generally even in muslin), or by a narrow run and fell. For a circular band for the wrists, armholes, or knees, always join the frill to form a round *before beginning to make*.

IV. Hem of frill.—This should be as narrow as it is possible for fingers to make it—*never* more than $\frac{1}{8}$ of an inch. It is sometimes made with just the edge rolled under and then hemmed. The short side of frill should be hemmed before the fold for the top is turned, and the corners neatly sewn up. The edge should be trimmed of fluff just before turning the hem; it will be necessary to turn nearly as much for the first time as for the second. No. 80 or 100 cotton is a suitable size for use. The hemming stitches should not be close, but uniform and regular.

After the hemming is completed, the half and quarters must be marked to correspond with band of garment; this is very essential in order to secure regularity in setting on.

V. Directions for making the roll and working the whip-stitch—It is needless to remark that scrupulously clean fingers are necessary for this process, as the slightest soil depreciates the work.

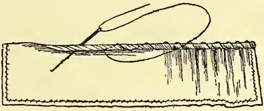


(Fig. 60.)

(Fig. 60) illustrates the stitch upon canvas.

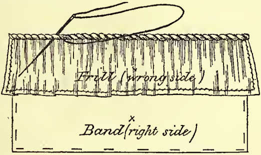
Trim the edge to be whipped just before beginning to whip, as any frayings will add to the coarseness of the roll, and the aim should be to keep this as neat and tight as possible. Coarser cotton is needed than that used for the hemming, as the material is required to be drawn up, and so a strain is put upon it. Hold the wrong side of frill to worker, in a position somewhat as for sewing, the raw edge being uppermost. With the thumb and finger of right hand turn down the tiniest hem possible at the right hand corner, or if a circular piece of frilling is in hand, begin at the join; on the fold secure the cotton as for hemming. An assistance is given to the rolling, if the material which is in the left palm be kept at a moderately tight tension, by third and fourth fingers. With an *upwards* and downwards gentle motion of the left thumb commence a neat, tight roll; be sure the raw edge is completely hidden. Damping the fingers is not a cleanly habit, but is frequently done to assist the rolling. It should be avoided as much as possible. For children's use tissue paper affords good practice until the knack of rolling is acquired. When about one inch of muslin is rolled insert the needle *from the back*, *i.e.*, from the *right* side of frill, being that part which is against the forefinger, and bring needle out pointing slantingly towards the chest, just under the roll. (Fig. 61.) The needle is again inserted from the back as before, about eight or ten threads from the last stitch, and so on. The needle is put in *as for sewing*, only in a slanting direction. Many insert the needle as for hemming, and so produce a wrong slope to the ridges. The distance between each stitch must be gauged by the eye when a start is made. It is as well to roll only as much material as a few stitches will cover.

For good work only one stitch should be taken at a time, as this ensures a smaller ridge to each whip; but for quickness, and for whipping lace, as many stitches may be taken upon the needle as it



(Fig. 61.)

will hold, in fact a milliner would not draw the needle throughout the length, but as it becomes full, slip the work on to the cotton. The work should be moved along the thread every inch or two, to make sure the roll has not been caught, as if so the frill will not draw, and the thread will break. Do not draw up too closely or the frill will get twisted, as it is very inclined to do this. If a quantity of frilling is needed it will be necessary to take new cotton at the half and quarters. Leave the thread hanging as for gathering, and commence the new cotton with a few backstitches on the wrong side just under the roll. If the above directions have been followed the roll will be divided into little ridges or curls, slanting from the right towards the left (Fig. 61), the stitches lying between the curl, in each groove or furrow.



(Fig. 62.) Setting on the frill to the band.

VI. Directions for setting on to band.—(Fig. 62).—The curls of the frill will be attached to the *folded* edge of band.

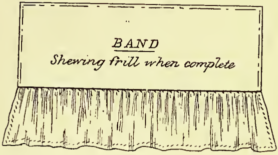
The worker should read here the remarks made on page 84, No. VII.

Hold *right* side of band to worker, and place the right side of frill to face it. Pin halves and quarters, and distribute the fulness evenly, securing the cotton around a pin. Fixing threads may be put in if desired, but pinning (with small pins) usually answers the purpose. Hold the material in the same position as for sewing, with the frill facing the worker. Secure the cotton as if about to sew. Insert the needle so that it catches up the fold of band, and passes through the top of the curl of the whip in a *slanting* direction. The setting-on stitch will then fall *in* the *groove* or furrow, between each ridge.

The diagram will help to make this clearer.

The fulness can be regulated with the needle as the work proceeds. Do not pull the stitches too tightly, or the thread will break when frill is flattened from the band. It will be seen that the whipping thread and the sewing thread both run in the *same* direction, viz., from right to left. Fasten off the whipping and setting-on cotton by sewing back a few stitches, and flatten out frill from band.

A deep frill, intended to fall over the shoulders, would be set-on on the right side; in this case place the *right* side of frill to the *wrong* side of band.



(Fig. 63.)

VII. Remarks.—(Fig. 63) shows frill complete. Some people set on a frill while holding the *band* towards worker; the same result is obtained, but it is more difficult to regulate the fulness, as the whipping thread is at the right hand instead of left. It would be necessary, if this plan be followed, to draw the frill up exactly to the length of band, and fasten off the whipping thread before setting on. Great care is needed to distribute the fulness evenly. An alternative method would be to commence with a knot, and make a knot at the end of whipping thread, then draw the frill up with the cotton in the reverse direction to that in which it was put in. This is not recommended, as the liability to break the thread is so great. It seems more natural, however, to hold any fulness towards the worker, and many prefer to teach it in this way. Whipping is an exceeding neat and quick way of gathering lace. Embroidery is sometimes whipped before setting on to a band; it lends a pretty effect to the trimming, especially if the material on which the embroidery is worked be not harsh.

VIII. Features in which the working of whipping and gathering are similar.

(1) The material is prepared *weft* way of stuff.

(2) The same proportion of material to band is allowed.

(3) The work is halved and quartered to secure regularity.

(4) The drawing-up thread is left unfastened while setting into, or on a band, and secured at the finish.

(5) Each little ruck or fulness receives a stitch in attaching it to band.

(6) Gathers and frills are fastened to a band with a stitch peculiar to each, requiring a certain position of the needle.

IX. Faults likely to occur.

(1) Badly prepared frill, hem too broad, ends untidy.

(2) Roll of frill too coarse and loose, irregular and clumsy.

(3) Incorrect stitch in whipping. Sometimes a "roll hem" is formed, by inserting the needle from the front as for hemming, the curls then slope from *left to right*, and cannot be set on properly.

(4) Whipping thread too tight, not allowing the material to draw up, or else so loose that a coarse, ugly ridge is the result.

(5) Frilling not evenly distributed along the band.

(6) Incorrect slope to setting-on stitch. Each groove should have its own thread lying in it.

(7) Cotton pulled too tightly in setting-on.

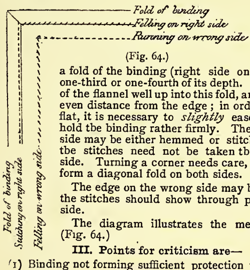
(8) Insecure fastenings and untidy joins.

(9) An unfinished and general clumsy appearance, through want of practice in the art of handling work, deficiency of finger skill, and a lack of delicacy.

XIX. BINDING FLANNEL.

I. Introduction.—Binding is a term used in plain needlework to denote the neatening of the edge of any material, by covering it with folded ribbon, tape, or braid, so as to protect and strengthen the edge, and at the same time keep the garment flat and neat.

Flannel binding, or galloon, is a thin, silky kind of ribbon, used to neaten the raw edge of flannel. Binding can be bought in widths, varying from ⅜ to ¾-inch. The widths are known in the trade as 2d., 4d., 6d., 8d., 10d., the thickness of the old penny coins being taken as the standard. It is not considered an easy task to bind flannel *well*, and some practice is necessary in order to produce work which presents a *perfectly flat* appearance on both binding and flannel.



(Fig. 64.)

II. Method of binding.— Keep right side of flannel uppermost. Turn down a fold of the binding (right side on to wrong), about one-third or one-fourth of its depth. Place the raw edge of the flannel well up into this fold, and fix carefully at an even distance from the edge; in order to keep the work flat, it is necessary to *slightly* ease the flannel, and hold the binding rather firmly. The edge on the right side may be either hemmed or stitched; if the latter, the stitches need not be taken through to the wrong side. Turning a corner needs care, the binding should form a diagonal fold on both sides.

The edge on the wrong side may be felled or run, and the stitches should show through plainly on the right side.

The diagram illustrates the methods of binding. (Fig. 64.)

III. Points for criticism are—

(1) Binding not forming sufficient protection to the edge of the flannel.

(2) Stitches badly formed—joins insecure.

(3) Binding or flannel, drawn or puckered, and the general appearance showing unskilful handling.

XX. GATHERING AND SETTING ON A SKIRT TO A BODICE.

I. Introduction.—The skirts of children's frocks and petticoats are attached to a band in rather a different manner to the ordinary method of setting in gathers, therefore a description is given of the mode of working.

II. Preparation of material.—After the placket slit is formed, the upper part of the skirt should be divided into half, quarters, and eighths, and each of these divisions marked with cotton a few inches below the edge. The raw edge should be neatly over-cast. (see Lesson XXI.)

If a thin material this edge might be hemmed, but it will add to the bulkiness of the waist, or folded once very narrowly and run is a quick method.

Turn down a fold about ½-inch in depth on to the wrong side. (Some years ago it was customary to turn down a wide fold at the waist, so that as a child grew, the frock might be lengthened by the piece of material taken in at the waist. This involved gathering and setting on the entire skirt again, and the marks of the previous work invariably looked unsightly. Provision for growing is now generally allowed for by tucks, a much more expeditious arrangement.) Take a good length of cotton, stouter than that in ordinary use on the garment, but if fine muslin or cambric it would be as well to use fine cotton double, so that it will not require a coarser needle, which would be likely to make holes in the material. Gather *close* to the edge of the fold on the right side, passing over *double* the quantity of material taken on the needle, being careful that the needle goes *through* the fold every time. Do not begin with a knot. A few back-stitches are preferable.

If the material of the skirt is considerably more than double the length of the band on the bodice, the gathers may be made a little larger accordingly, so that each division of the skirt may be set on to its corresponding piece of band, regularly and without excessive fulness.

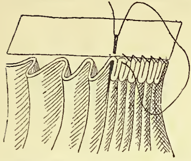
Unthread the needle at each quarter and take fresh cotton—begin again just in front of the old end. When the gathering is complete, the work will require stroking carefully. (See Lesson IX.)

The skirt is now ready to be put on the bottom of the bodice.

III. Attaching skirt to bodice.—Place the right side of skirt to right side of bodice—edge to edge. Loosen the gathers, and pin halves, quarters, and eighths of bodice to the same divisions of the skirt.

Carefully adjust the gathering cotton round the pins, and arrange the gathers regularly with the needle. Tack if preferred. It is usual to hold the fulness towards the worker, but some people find it more convenient to keep the band to worker, because the gathering thread is then at the left hand, and so is ready for readjustment, if necessary.

The diagram (Fig. 65) shows the end flattened out, so that the setting-on stitch can be easily seen; of course for practical work both gathers and band are held between the thumb and forefinger. The edge of each gather is attached to the band by what may be called a "double sewing stitch." The sewing stitch is worked in the usual way, and then another stitch is taken, bringing the needle out, without advancing any distance, in the same place as the cotton comes from. The stitch appears in the shape of the letter N.



Setting gathers of frock on to a bodice. (Fig. 65.)

If the gathers are very close this double stitch need not be taken at *every* gather. Care is necessary when passing the halves and quarters to make the division as invisible as possible. Thread the needle with the gathering cotton when work is complete, and fasten it off neatly on wrong side. Flatten out from band. Sometimes a double row of gathering is worked. This has the effect of making the gathers more regular. The second row must be parallel with the first and exactly the same proportions kept.

IV. Remarks—A more fanciful way of working is to put the skirt on so that a frill is seen on the right side just under the waist. Decide upon the depth of frill, and turn down a fold on to the wrong side the required depth of frill, adding ½-inch for turning on the wrong side.

Now turn the folded edge over on the *right* side for the depth of frill, and gather through the four thicknesses close to the edge. Set on to band in the usual way, when the frill will be hanging loose on right side

This method is only suitable for thin material.

Another plan is to gather the skirt on the single stuff, a good ¼-inch from the edge. The band on the bodice must in this case be split in half, set on in the ordinary way, as for single material, and the other half of the band used to neaten the raw edges on the wrong side.

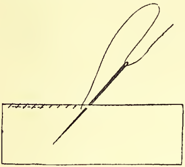
Yet another way of arranging is as follows:—Turn down a narrow hem (⅛-inch) on the wrong side of garment, and keep the wrong side facing worker. Secure the cotton at the fold of the skirt by a back-stitch. Take a stitch as for ordinary gathering at the lower part of the hem; at a short distance to the right of last stitch, take a similar stitch at the fold of skirt, which will show strands of cotton reaching from the top to the bottom of the hem. Continue working alternately at edges of fold, which, when drawn up will show a quantity of little rucks, quite neat on the wrong side, and forming an effective sloping appearance on the right. Set the skirt on to the band as shown in Fig. 65.

XXI. OVER-CASTING.

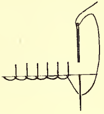
I. Remarks.—This stitch is used for neatening purposes, to prevent raw edges from fraying. It is not a recognised stitch upon any kind of calico work—belonging chiefly to dress material.

There are two methods usually adopted.

II. Directions for working. 1st Method—Commonly used for neatening seams in bodices. Carefully trim the raw edges. Over-casting is worked from left to right. Hold the material along the finger as for sewing, only in readiness to begin at the left hand side; run the needle parallel with the edge for ½ an inch, and bring out about ⅛ of an inch down; hold the work so that the thumb and finger cover the raw edge while drawing the needle out for commencement, as the material will be less likely to fray; insert the needle a short distance to the right and bring out about ⅛-inch down. Always draw the cotton out towards the right hand. The stitch should not be too close, eight to an inch are ample. (Fig. 66.) Generally the quicker over-casting is done, the more regular it is likely to be. Fasten off by running needle parallel with the edge.



(Fig. 66.) 1st Method.



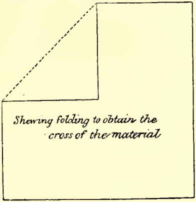
(Fig. 67.) 2nd Method.

2nd Method.—(Fig. 67).—This is the embroidery stitch (sometimes erroneously called button-hole stitch, but it will be noticed that a twist of the cotton is at the edge, whereas the button-hole edge has a knot). It is also used for the purpose of neatening blankets, hence it is often called "blanket stitch." The wrong side of a print patch is worked in this way. Hold material so that raw edge faces worker, and the bulk of the article lies over the hand. Begin at left hand corner, run needle down at right angles to raw edge; hold cotton under thumb: insert the needle a short distance to the right; the depth that the over-casting is needed will regulate how much material is to be taken on needle, but do not loose the thumb till cotton is almost home. The distance the stitches are apart will depend upon the article in hand, 8 or 10 to an inch are usually sufficient. Each stitch is made in the same way; be careful not to pull the cotton too tightly, or the raw edge will turn under and make a ridge. To fasten off, run cotton in the direction of the stitch, *i.e.*, at right angles to edge, and secure by a back-stitch.

XXII. DIRECTIONS FOR CUTTING MATERIAL ON THE CROSS, AS FOR A PIPING CORD.

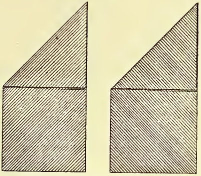
I. Introduction.—Cording is an extremely neat method of finishing off the neck and armholes of a petticoat bodice, or a child's frock, as it prevents stretching.

II. Preparation of material.—Strips of material cut upon the cross or bias are necessary. As cutting material on the cross often presents a little difficulty, a description of the best way to manage cross-cutting way will be advisable. Material on the cross is much used in dress making and millinery, and frequently in underclothing a strip of calico on the bias is needed. The advantage of material on the cross lies in its power to give or stretch, hence it is a suitable means of neatening any kind of curve.



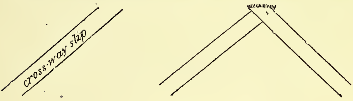
(Fig. 68.)

To cut on the cross.—(Fig. 68.)—Lay the material right side downwards upon the flat surface. Fold over one of the top corners, so that a diagonal crease is made. If the fabric be twilled, or has a "grain," such as merino, serge, cashmere, plush, crape, &c., be careful to fold the corner over, so that the little lines of the twill look perpendicular to the fold, as the appearance is not effective if the lines run *across*. (Fig. 69.) Cut along the crease made, and a half square piece of material will be cut off, leaving a true cross line on the fabric. Now determine the width of the strip needed, and measure along the straight edge *once and one-third* the depth of strip, *e.g.*, suppose a band of 3 inches is required, it would be necessary to measure 4 inches on the straight or selvedge. Fold the material over, pin edges, and cut in crease; the other strips can be cut by placing the first one on the cross edge as a guide in cutting, or perhaps the surer way is to measure again.



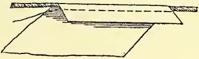
Wrong Cross. (Fig. 69.) "Correct" Cross.

If the strips cut are not of sufficient length, they must be joined by running the two right sides together (Fig. 70), flattening the seam, and cutting off the projecting ends. These joins will be scarcely noticeable when work is finished.



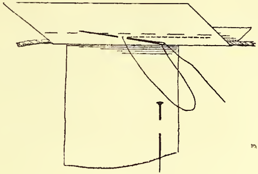
(Fig. 70.)

To put in the cord.—Cotton cord, sometimes called "bobbin," is used for piping. Hold the cross-way strip wrong side uppermost, place the cord a good $\frac{1}{4}$-inch from the top edge, fold this edge over the cord, and tack in place close under the roll. (Fig. 71.)

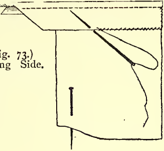


(Fig. 71.)

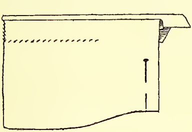
To attach the cording to material.—Place the piping with its raw edge facing downwards on to the right side of garment, about $\frac{1}{4}$-inch from the edge of the material. Be sure a good margin is left at right hand. Stitch in place close up to the cording, taking the stitches well through. (Fig. 72.) When the stitching is complete, turn to wrong side, flatten down the cross-way piece, so that the corded edge shows clearly on right side. The corner should now be cut straight, allowing for turnings, and the cord cut close before turning under the edges, or clumsiness will result. A narrow fold must be made along the cross-way edge and felled down to the garment. (Figs. 73 and 74.) If the material be lined it is not necessary to let the stitches show through. The cross-way edge may be stretched to make it set well, if it is to be felled round a curve.



(Fig. 72.)



(Fig. 73.) Wrong Side.



(Fig. 74.) Right Side.

To fix a false hem.—Place the right side of strip to right side of garment, edge to edge, run very evenly close to the raw edge, turn over the cross-way strip to the wrong side, make it perfectly flat, carefully turn under the raw edge, and fell strip to garment.

XXIII. EYELET-HOLES, LOOPS, HOOKS, EYES.

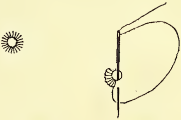
I. Description.—Eyelet-holes, loops, and eyes are means used in conjunction with a hook, to fasten different parts of a garment together, which need to be close fitting.

Eyelet-holes are also used as an outlet for a draw string at the waist or neck of a garment. Hooks and eyes are not used in underclothing, and if put upon washing materials intended for ironing only, a stain is frequently left in the fabric; buttons and button-holes are preferable in any case.

Loops are sometimes used with small buttons as a fastening, when there is not a convenient place facing the button upon which to work a button-hole.

II. Directions for working.—Eyelet-holes are usually worked on double material. It is necessary to pierce the hole with a stiletto, which is a pointed steel implement with a round, smooth shank, gradually increasing in size from point to hilt. There are two methods of working eyelet-holes.

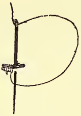
1st Method—(Fig. 76).—Slip needle between the folds, and bring out at edge of hole; grip the material very firmly between the thumb and left forefinger, and *tightly* over-cast the edge of hole all round from left to right, gradually turning the material round as work proceeds; pass needle to wrong side, make a back-stitch, slip between fold and cut cotton. The edge of hole should feel like a piece of fine twine.



(Fig. 76.) 1st Method. 2nd Method.

2nd Method—(Fig. 76).—Slip between fold, and bring needle out about ⅛-inch from raw edge of hole; hold cotton under thumb, put needle into hole, and bring out slightly to the right of the cotton; loose thumb and draw cotton home. Continue working thus all round hole, fasten off as above.

Loop.—(Fig. 77).—This consists of several strands of cotton, passed over and through the material to form a foundation, upon which to work over-casting, in order to make a firm edging for the hook or button. The twist of the over-casting stitch forms the outside portion of the loop, so that the hook rests on the rounded edge.

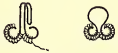


(Fig. 77.)

To form the strands.—Slip needle between the folds, and bring out at right side; put needle in a short distance to the right (a good ¼-inch for a hook), and bring out again at starting place. Repeat this process till four or five strands are formed (fine cotton would need more foundation threads). Be careful to keep the strands an even length. If the loop be needed to pass over a button, as is sometimes the case for small articles, such as babies' frocks or pinafores, the strands should be left sufficiently slack to allow the button to pass through easily.

To work the edging.—Commence from left hand, hold cotton down with the left thumb, put needle under the strand (the eye of needle is preferable), and draw out towards the chest, loosing the thumb hold as cotton is drawn home. Repeat till strands are covered. To fasten off, pass needle to wrong side, make a backstitch, slip between fold and cut thread. The beauty of the loop consists in the uniformity with which the stitches are made. The quicker the working the more regular the appearance, as a rule.

Hooks and eyes.—(Fig. 78.)—Strength and neatness are the two features to consider.



(Fig. 78.)

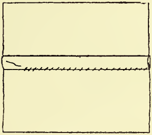
The best way to secure these fastenings to a garment is to overcast the rings of wire on to the material, and to fasten the hook by strands of thread crossing the shank. Fasten off by backstitches as for a loop. Occasionally it is necessary to fasten a hook to a garment with the shank uppermost; in this case the hook would only be secured by the rings of wire. Hooks are sometimes sewn on in this manner for a loose-fitting garment, because the hook is more likely to remain fastened if this method be adopted.

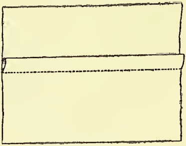
XXIV. DIFFERENT METHODS OF MAKING SEAMS IN GARMENTS.

I. A sew-and-fell.—Described in Chapter IV.

II. A run-and-fell.—Described in Chapter XV.

III. A mantua-maker's or hemmed seam.—This is sometimes used on fine material, such as muslin or cambric. No stitches are seen on the right side, but a ridge of material is unavoidable on the wrong. It is a quick method of joining material for frocks, pinafores, or petticoats, as one set of stitches suffices to keep the seam firm. It is worked as follows :—Place the right sides of material together, the front raw edge just a trifle (barely $\frac{1}{8}$-inch) below the back ; fold both edges over together as for an ordinary hem (narrow), and then hem through the double stuff, taking the stitches well through to the reverse side. (Fig. 79) shows the seam flattened down.


(Fig. 79.)


(Fig. 80.)

IV. A French seam (so-called).—This is another method of joining material, which makes both right and wrong sides neat. (Fig. 80.) It is worked thus :—Place the two *wrong* sides of the material together, the raw edges being perfectly even, at a distance of about $\frac{1}{8}$-inch from the edge, lightly run the two pieces of stuff together, cut off any fluffy edge, turn the material to the wrong side, so that the right sides are facing ; press the join well between the thumb and finger, so that it may come quite at the edge, tack firmly and stitch nearly a $\frac{1}{4}$-inch from the joined edge. Be very careful that the frayings of the raw edges do not show through on right side. This kind of seam is often used for petticoat bodices and muslin frocks.

V. A flat seam is formed as follows :—

Turn down the edge of the material with a narrow fold on to the *right* side ; turn the other edge on to the *wrong* side ; let the right sides of the material face ; place the folded edge which was turned last just underneath the raw edge of the first piece ; fix in place ; fell the fold on to the material beneath it. This may be held either as for ordinary hemming, which perhaps is rather awkward to handle, or worked as if hemming upside down (the latter plan is quite common in dressmaking) ; when the fold is secured, turn the upper folded edge over the lower one, and fell into place.

VI. Counter hemming.—This is another way of joining two pieces of material, in which hemming stitches are worked on both *right* and *wrong* sides. It produces a flat seam, and may be used on garments in the lower part of a girls' school, or the upper classes of an infants' school.

Prepare thus : Turn down the raw edges of the material with a narrow fold, one piece on to the wrong side, and the other on to the right ; lay the raw edge of one piece over the edge of the other, so that it effectually covers the turnings ; this overlapping should be about as wide as an ordinary seam ; fix the edge in place, and fell it down ; turn to the other side of material, and fell it similarly.

VII. A stitched seam.—This is the method usually adopted on dress materials, and the one which the sewing machine works so perfectly. It is used where great strength is needed. The raw edges are placed evenly, with the right sides of material facing. The stitching is worked at a certain distance below the edge, according to the thickness of the material ; the raw edges are trimmed of frayings, flattened out right and left and over-cast. (Sometimes the seams are over-cast at the edges, without previous flattening.)

❧

XXV. SCALLOPING.

I. Remarks.—Scalloping is a term used in needlework, to signify the working and cutting out of a border to resemble the edge of a scallop's shell.

A strict plain needlewoman may perhaps regard this as a branch of fancy work, but as its adoption forms a pleasing variety to an otherwise plain garment, a description of the mode of working may not be out of place.

II. Uses.—To ornament any flannel garment, such as a petticoat, barracoat or baby's long flannel, head flannel, nightingale, bodice, &c.

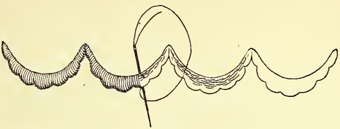
III. Preparation of material.—At the bottom of a flannel petticoat, scalloping should be worked on double material, therefore it is necessary to make a deep hem, say 2½ to 3 inches, as the sloping of the scallops will tend to narrow it. Messrs. Briggs and Co. manufacture the *only reliable* transfer patterns, with scallops of various sizes, stamped upon tissue paper, in readiness to transfer to the material. This paper can be bought from any draper selling fancy goods. Its cost is trifling, about ¾d. a yard, according to size and pattern. (See advertisement, page 229.)

To transfer the pattern.—Lay a clean cloth over the edge of the flannel, and pass a warm iron over the cloth in order to smooth the nap or fluff of the flannel—lay the transfer paper, right side downwards, just to the edge of the hem—pass a moderately hot iron over the paper, drawing it up from the flannel with the left hand as the iron is removed (if the paper is allowed to remain on the material it is apt to stick). A second person would be an assistance to guide the transfer paper at the edge of the material, just in advance of the iron. Scalloping may be worked upon flannel with either wool or silk. A coarse crewel needle is suitable.

The beauty of the work consists in the regularity of the scallops, the even tension of each stitch, and the absence of puckering.

In order to give the full raised effect to the stitches, it is necessary to lay a full padding of wool close to the outline—wool is suitable even if silk be used for scalloping, as this thickening is hidden by the working. The diagram illustrates the manner of placing the padding, which consists of strands of wool run smoothly together, with as much wool showing upon the upper side as possible, the larger amount of stranding being kept to the widest part of the scallop. This process is similar to the "couching" of embroidery work. If preferred, the wool need not be run in as shown in diagram, but left loose (or caught only below the point of scallop), and worked over. If the scallop is a wide pattern this is better.

IV. Method of working the stitch.—(Fig. 81.)



(Fig. 81.)

(1) Hold the edge of garment to worker.
(2) Work from left to right.
(3) Slip needle between the folds and bring out at outer edge of scallop.
(4) Hold the thread under the left thumb, making a loop from left to right.
(5) Insert needle just outside the inner outline of the scallop, and bring it out again to the right of the thread, loose thumb and draw gently towards the worker. This produces a twist at the edge.
(6) Continue working thus, letting the stitches just touch each other, so as to hide the padding effectually, adapting the length of each stitch to the shape and size of each scallop. Care is necessary at the corners, to make the stitches taper nicely and set well. All joins are effected by slipping the needle between the folds of the material, the new thread being brought out just where the old one ended.

This process is often erroneously called "button-hole stitch," and the edge spoken of as a "button-holed edge." It is known as such to workers of embroidery, and is apt to mislead a worker of plain needlework ; but by reference to the lesson on button-holing, it will be seen that the method of holding, manner of working, and appearance of the edge, are quite different from the button-hole stitch of *plain* needlework.

The method of working a scalloped edge is similar in principle to that adopted for over-casting a print patch.

V. Shaping the edge.—After the working is complete, the edge is shaped. A pair of small, sharp scissors are necessary. Hold the garment right side uppermost, with the scallops to the right hand, and cut the material away. Be *very careful* not to cut the threads of the working. The cutting is rather a slow process, and is best done a little at a time, as the general finish of the work can be so soon spoiled by hurried cutting.

XXVI. HEM-STITCHING.

I. Introduction. — This may be considered a branch of fancy work, but as the process is sometimes adopted on children's frocks, aprons, pocket-handkerchiefs, sheets, and other articles of house linen, a description of the mode of working may be useful. The sampler of olden times, spoken of in the chapter on Marking, invariably had a hem-stitched border. The hem-stitch is also used to prevent fringes at the ends of towels from further ravelling, and so becoming untidy.

II. Definition.—Hem-stitching, as its name suggests, consists of a hem fixed in the ordinary way, *perfectly straight by a thread*, with a certain number of the threads of the material withdrawn just below the hem. These threads are arranged in clusters of three, four, five, or six, and fastened to the fold of the hem by stitching, which produces small, open spaces between each cluster of threads.

III. Material used.—It is advisable to practise on coarse fabric, where the threads can be easily seen. Cheese-cloth canvas is also suitable. The size of the cotton must be regulated by the coarseness of the threads of the material. For very fine work, lace thread is sometimes used.

IV. Preparation of material.—Decide on the width of hem, according to the requirement of the article in hand, and fold it down in the ordinary way. The hem may be either on right or wrong side according to the material, must be quite even, and strictly by a thread, or the general appearance will be spoiled. *Just below* the fold draw out as many threads as are necessary, which will depend upon the texture of the material, and the required size of the interspaces. On *coarse* material two or three are generally sufficient. After the first thread is withdrawn the others are easily removed. Fix the hem so that the folded edge is exactly level with the *upper* part of the drawn threads.

V. Mode of working.—There are several methods of hem-stitching, each worked in a slightly different way, and although the shape of the stitches may not be alike in each method, the result, viz., the open work, is practically the same. The simplest method is described here, and is worked from *right to left.*

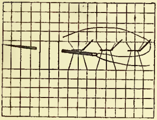
Hold work in the usual way over the fingers of the left hand.

(1) Commence as for ordinary hemming, when the cotton will be upon the fold of the hem.

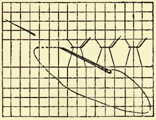
*(2) Put the needle in just underneath where the cotton is brought out, and in the drawn threads, taking up horizontally upon the needle a certain number of strands (three in illustration). Any number may be taken up, varying with the size of the threads of the material. (Fig. 82.)

(3) Insert the needle back in the same place as for ordinary stitching, and bring it out in the usual manner for simple hemming, just on the edge of the fold, and exactly above the end of the back-stitch. (Fig. 83.)

(4) Repeat from * till the hem is secured throughout its length.



(Fig. 82.)



(Fig. 83.)

If the stitch be analysed it will be seen to consist of two parts—(1) The stitch taking up the required number of threads. (2) The back-stitch, with the needle brought out in position for hemming, which has the effect of drawing the threads in groups, and at the same time securing the fold of the hem, with the needle in readiness for making the next stitch.

The cotton should be drawn rather tightly as each stitch comes home, but not in any way to pucker the material which must lie perfectly flat, with a regular and even distribution of threads to each stitch.

VI. Remarks.—Hem-stitching is principally used in the lately revived "drawn thread embroidery," where most effective, inexpensive, and exceedingly pretty specimens of work can be done, if one has the patience, ambition, industry, good eyesight, finger skill, and the amount of leisure time which the work necessarily involves.

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PART II.

Patching.

INTRODUCTION.

Patching is that method by which any worn-out part of a garment can be restored, by means of a fresh piece of material taking the place of the old.

It is a very humble sort of work, but, nevertheless, an important and necessary branch of mending, requiring the exercise of forethought, straightness of vision, skilful handling, and plenty of patience.

Patches are used when thin places and rents are too worn to be repaired by darning. To "patch" well is equally as important as to "make" well, for by skilfully mending any article, its time of service may be lengthened.

Two different sorts of patching may be noticed:

(1) Cutting away the worn material and replacing it by another strong piece.

(2) Taking away the worn-out part, and placing an entirely new portion in its stead, *e.g.*, a wristband, collar, sleeves, front of a shirt, &c. If a patch be needed anywhere near a seam, the seam should be unpicked, the worn material cut away and new supplied, and then the seam closed again. This is necessary when patching the under arm of a garment.

Every kind of material will admit of patching, but calico, print, and flannel, are the patches in ordinary use.

The first detail for this description of mending is to obtain material which will match the original in colour, quality, and texture. This material should not be new for practical work, but good sound pieces of the same stuff as the article in hand. To patch old material with new, is merely to make an arrangement for another tear around the patch. The strain in wear is sure to be too great for the old fabric. The secret of good patching lies in the fixing, and the careful removal of the worn part, for if this be cleverly managed the work is sure to be successful. The stitches used in mending are comparatively simple, though requiring a nicety of finish and absence of any pucker. The patch presenting least difficulty is in flannel. For teaching purposes new material will be unavoidable.

XXVII. A FLANNEL PATCH.

I. Introduction.—Material with even threads should be chosen for the preliminary specimens. It is supposed that practice in herring-boning has been given by working strips of flannel, and that the methods of commencing, finishing-off, and joining, are quite familiar and easily managed. (See Lesson VII.).

II. Garments likely to need patching :—

Vests.—Under arm and sleeve.

Bodices.—Under arm and sleeve, and that portion of the bodice against which the whalebone of the corset or dress bodice rubs. This latter will wear for some time before patching is necessary, if darned as for a thin place as soon as the "nap" wears off the flannel.

Petticoats.—The knees.

Shirts.—The shoulders, under arms, sleeves, and elbows.

III. Shape of patches.—(1) Square, (2) oblong, (3) three cornered or triangular. For practice purposes two pieces of material are necessary, one larger than the other. The large pieces will be spoken of as representing the "garment" to be mended, and the smaller the "patch" with which to repair the hole.

IV. Directions for working a square or oblong patch.

(1) Have a hole actually cut in the larger piece to represent the veritable hole if patching a real garment, and *cut* the patch very evenly, quite by a thread.

(2) Find the selvedge way of garment, and either mark with a pin or place parallel with desk or table.

(3) Find the right side of the garment, and lay it face downwards (the woolly or fluffy side is the right, the wrong side shows the threads more clearly).
The "fluff" or "nap" should run from left to right.

(4) Treat the patch in the same way as the garment (Nos. 2 and 3).

(5) Place the patch on the wrong side of the garment, over the hole and worn part; secure by a few pins. (Be careful that *the selvedge threads of the garment and patch are parallel*, as this is the fundamental principle of all patching.)

(6) Fix patch all round, close to edge, beginning at the selvedge side. The *better the fixing the flatter the patch*. (As herring-bone stitches protect the raw edge, no turnings are necessary.)

(7) Herring-bone the edge of the patch on to the wrong side of garment. (Be sure the upper stitches are taken through both thicknesses of material, and that the lower part of stitch comes *just under* raw edge.) I subject myself to criticism by herring-boning my patch on *wrong* side before the *right* is worked. I give two reasons for my preference :—

(1) It is more practical, because, supposing the garment to be a cumbersome one, and the patch needed in an awkward part, having fixed it carefully on the wrong

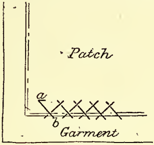
side, it is not wise to disarrange the garment for the purpose of treating the right side first.

(2) The herring-bone stitches showing through on the right side, are a surer guide in cutting away the worn part than merely tacking threads would be.

Perhaps the liability to pucker may be greater, but this may be overcome by *very careful fixing* in the first instance.

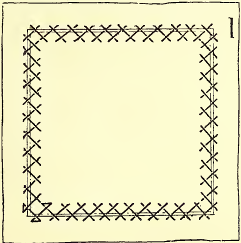
Nearly *every* home manager will agree with (1), and the *majority* of teachers with (2).

Should the worker prefer to treat the *right* side first, follow directions Nos. 8 and 9, and come back to 7.



(Fig. 84.)

Begin at the *lower left* band corner, and at the selvedge side; *a b* in (Fig. 84.) shows the starting point. (Fig. 85.) shows method of turning corner on wrong side. It may roughly be described thus:—Stop at *lower* cross of stitch;



(Fig. 85.) Patch complete on wrong side.

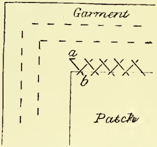
turn work round towards left hand; start again at *lower* cross of next stitch. The herring-bone stitches should be so gauged that the last stitch of the side comes about two threads from the end, and the first stitch on next side the same distance in. This is a detail, but it helps to make a successful square corner.

(8) Turn garment to right side (the herring-bone stitches should show through as two lines of running), and cut away worn part, leaving *eight threads clear* all round from the *lower* line of stitches. There should be 4 threads, or the depth of the herring-bone stitch, between the stitches on the right and wrong side. A good method of cutting away the damaged material is as follows :—

(1) Put a pin horizontally in the middle of each side, eight threads from the lower line of the herring-bone stitches.

(2) Put the scissors in the hole and cut up to the pins.

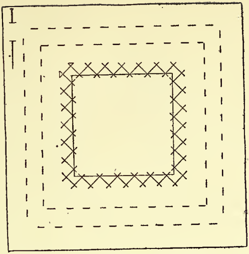
(3) Remove the pins, and cut parallel with the stitches a piece from each adjacent side alternately, to meet in the corners. Holding patch to the light will test if all sides are equal. (Excellent practice is given to Standard IV. girls, by a lesson on a "paper" patch preparatory to the flannel, merely for the purpose of teaching the cutting away of the worn part and acquiring the handling of the scissors. Children invariably cut away too much, and so spoil the piece of flannel representing the "garment." In the hands of a skilled teacher this is not only a novel but a valuable lesson, at which even a dullard may shine.)



(Fig. 86.)

The first portion of stitch (a b) should be commenced so that the point of needle at lower part of stitch comes out exactly *in the corner. It does not show this quite plainly enough in diagram.*

(9) Herring-bone the edge of garment on to the patch, all round the inner square, beginning at *top* left hand corner; *a b* in diagram (Fig. 86.) shows starting point. To turn corner—stop at *upper* part of stitch; turn work round, and start next side at *upper* part. (Fig. 87) illustrates this. Gauge the last few stitches of a side, so that *as near as possible* the lower cross of last stitch comes *in the corner*. The stitches, which meet at the corner, form a diamond-shaped or square corner.



(Fig. 87.) Patch complete on right side.

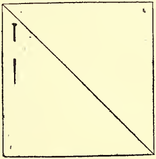
The lower part of stitches should meet exactly in each corner.

V. Faults liable to occur (in addition to those mentioned in connection with herring-boning, page 37):—

(1) No hole to be mended.
(2) Patch and garment not agreeing as regards (*a*) selvedge way of stuff, (*b*) right and wrong sides, (*c*) fall of the nap.
(3) Patch badly fixed, uneven and puckered in appearance.
(4) Corners not correctly turned—*stitches not meeting exactly in each corner.*
(5) Too much material cut away, and consequently fell too narrow.

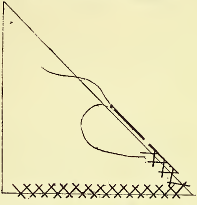
TRIANGULAR FLANNEL PATCH.

I. Shape of patch.—This is usually taken from a *square* of flannel, therefore two sides of the patch are cut by the threads of the material and one is on the cross. (Fig. 88.)

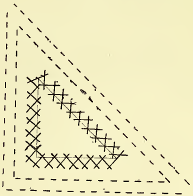


(Fig 88.)

II. Directions for working.—Exactly the same method can be adopted as is used for a square patch. Great care is necessary in cutting away the worn part on right side, especially along the side which is on the bias. Allow material for the fell of patch, so that the *depth* of the herring-bone stitch is left between the stitches on the right and wrong side. A line of tacking, or a piece of paper placed parallel with the stitches, would serve as a guide by which to regulate the cutting. Hold patch to the light to test its regularity. The diagram gives an idea of the mode of turning the corners. (Fig. 89.) (Fig. 90) shows the patch complete.



(Fig. 89.) Showing corner on wrong side.



(Fig. 90.) Patch complete on right side.

Another stitch might be taken with advantage at the bottom right hand corner of inner square.

III. Faults as in square patch.

XXVIII. CALICO OR LINEN PATCH.

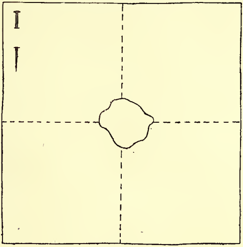
I. Introduction.—The above patch is used to repair weak places and holes in garments and house linen, by the insertion of another piece of material similar to the original.

II. Material used.—For teaching purposes new material is generally adopted, because of the difficulty of obtaining worn calico in sufficient quantities, but for "practical mending" new cloth should not be put upon old fabrics; good pieces of the same stuff as the article is made of are preferable, or matching it in texture as nearly as possible. If new material must be resorted to, it should be washed before being used, which will remove any "dress," and so the patch will be less likely to make a strain on the worn article.

III. Directions for mending.—Calico patching requires great care and skill in fixing, in order that the work may be quite flat and neat when finished. The stitches used for mending are either sewing and felling, or running and felling, so that the difficulty lies in the placing. For practice purposes, two pieces of material are necessary, the larger piece representing the "garment," and the smaller the "patch." The patch must be sufficiently large to well cover the hole and the thin worn part which usually surrounds it. The *shape* of the patch, either square or oblong, can be determined by the hole it is to cover. Be sure it is cut or torn by a thread.

(1) Have a hole actually cut in the larger piece to represent the true hole if patching a worn article.

(2) Fold two creases, one selvedge way and the other weft way, *i.e.*, at right angles to each other, as nearly as possible over the centre of the worn part of garment. (Fig. 91.) Treat



(Fig. 91.)

the patch similarly, dividing it by creases into four equal portions. Be sure these folds are all even with the threads of the fabric.

(3) Mark right side and selvedge way of garment and patch with a pin. The smooth or glossy side of calico is the right, the wrong side is rougher looking. This difference is not noticeable in all calicoes.

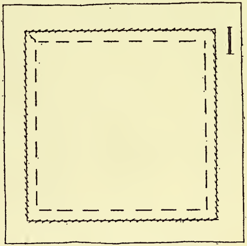
(4) Face the *right* side of garment downwards, with the selvedge way running even with the desk or table.

(5) Turn down a narrow fold $\frac{1}{6}$ inch on to the right side of patch—even with a thread—selvedge sides first—press corners well.

(6) Place the patch, with the raw edges downwards, upon the wrong side of garment. Be very careful that the selvedge threads of both patch and garment run in the same direction (this is very essential), and that the creases lie on each other. Put in a few small pins.

(7) Fix patch carefully all round, close to edge, keeping the corners true to a right angle. The firmer the fixing the flatter the patch.

(8) Fell all round on wrong side before the right is touched (Fig. 92.)



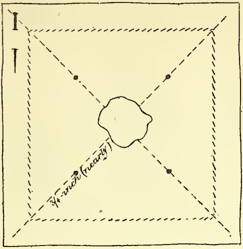
(Fig. 92.) Wrong side showing felling.

The worker must read here the reasons stated in favour of this way of working as given under "flannel patching" (page 106), reading the word "felling" for "herring-boning."

(9) Turn to the right side, and cut away the worn and damaged part by the following method :—

(1) Make a short diagonal crease from each corner.

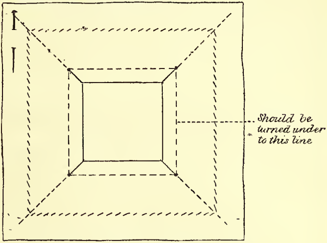
(2) Put a pin prick *nearly* $\frac{3}{4}$ inch down the diagonal crease. It is well to measure this distance till the eye is trained to gauge accurately. These pin marks should be even with the threads. (Fig. 93.)



(Fig. 93.) Right side showing preparation for cutting away the worn part.

(3) Put the scissors into the hole; cut up the diagonals as far as the pin pricks, using only the *points* of the scissors when cutting close to pin marks.

(4) Fold back each little triangle with a broken apex, and cut in the creases thus made. Hold up to the light to test if the cutting is regular. Should one of the sides be deeper than the others, make a small snip in the corners, fold back and cut again.


Should be turned under to this line

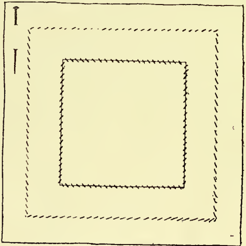
(Fig. 94.) Right side showing worn material cut away.

(5) Put pin marks $\frac{1}{6}$ inch *up* the diagonal. Mitre the corners, *i.e.*, snip up at an angle of 45°, as far as pin holes. (Fig. 94.)

(10) Turn under the raw edge and fix close to the fold, keeping the corners exactly to a right angle. The needle can assist in the turning.

Sew all round the inner square, holding the *patch* towards worker. If the *garment* be held to the worker the appearance is somewhat spoiled, as the patch will sink in a shallow instead of being on a level with the surrounding material. Be sure that the needle is put in quite straight in sewing, and that the work is held as described in that lesson, otherwise the patch will be puckered.

(11) Flatten sewing. The fell of the patch should be about ⅜ of an inch when complete; if much narrower than this the turnings will prevent the patch from being quite flat, especially at the corners. (Fig. 95) shows patch complete. It will be noticed that the *stronger* stitch, viz., sewing, is borne by the *patch*, and the *less strong*, viz., hemming, by the thin *garment*.



(Fig. 95.) Patch complete on right side.

A stitch should be made exactly in each corner; the diagram does not show corner stitches sufficiently close.

There are other methods of preparing calico patches, and a successful seamstress should be able to adopt any method, and yet produce a good patch, but for school use, it is a question of which plan is easiest for a child to manage. The above method has been most successful, hence the reason for preferring it to other ways of working. If calico or linen to be patched is very thin, and not likely to bear the strain of sewing, the patch may be felled on both the right and wrong sides.

Another common method of working is as follows:—

(1) Prepare as stated in Nos. 1, 2, and 3 of previous plan.
(4) Face the *right* side of garment uppermost.
(5) Turn down patch as for a sew-and-fell seam, nearly ⅜-inch in depth—opposite sides first—press corners well.

(6) Place patch on *right* side over the hole, so that selvedge threads of both patch and garment are parallel; fix close to the edge.
(7) Sew the edges of patch to garment on the right side, being very careful at the corners to avoid catching up the material that forms the fell, otherwise the corners will not flatten out.
(8) Turn to wrong side, and cut away the worn part to within ⅙-inch of the sewing stitches; make a snip at corners.
(9) Flatten the sewing, turn down the fell of the patch, and fell it to garment.

The difficulty with the corners is probably the reason this method is not more popular. Another way, similar to the last, is worked as follows:—

Prepare as mentioned in last method, but instead of turning down as for a sew-and-fell, make *one deep turn*, nearly ⅝-inch, on wrong side of patch—bend back each corner of the turn, so that it quite frees the folded edge, which will prevent it being caught in with the sewing stitches. Sew patch to garment—prepare the wrong side exactly as described in the last method, only the raw edge of the fell will require to be turned under ⅙-inch.

This is a successful plan, and deserves to be more widely known.

Another method is to run and fell the patch to the garment. Prepare thus:—

Cut away all worn part of garment, quite even to a thread—snip the corners slightly—cut patch quite ½-inch larger than hole. Place the right sides of patch and garment together (selvedges of both running parallel); prepare work as for a run and fell (page 73). Hold garment to worker. The running should be about ¼-inch down from the raw edge of garment. The corners need firm stitches, and the running must be true to a right angle at each corner. Flatten down the fell, and then fell the patch on to the garment.

This is a quick method of patching, but some practice is necessary in order to obtain a nice flat patch.

VI. Faults liable to occur—

(1) Hole not cut in garment.
(2) Selvedge of patch and garment not running parallel with each other.
(3) Patch unevenly turned and badly fixed.
(4) The patch *sewn* to garment on the *wrong* side, instead of being felled.
(5) Patch puckered, corners not true to a right angle, badly mitred, and altogether bulky and clumsy.
(6) Width of patch too narrow or needlessly wide, and turnings not sufficient to be secure.
(7) Errors in formation of the stitches used, as described in those lessons.

N.B.—The sewing and felling stitches must match in point of size.

V. Remarks.—A slip of paper, with ⅙ inch and nearly ¾-inch marked at the edge, is a very helpful guide to assist the measuring. This can be dispensed with when proficiency is gained. Any plan which helps to secure accuracy of cutting—as this is the difficulty—should be adopted.

XXIX. A PRINT PATCH.

I. Introduction.—Print is a common make of calico of a loose texture, upon which a coloured pattern is stamped. If this pattern retains its colour in washing the print is said to be "fast." (In washing print, use no soda in the water, do not boil the articles, rinse them in salt and water, dry quickly, but not in the sun.)

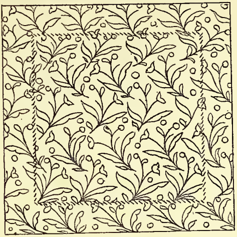
Dresses, aprons, children's frocks and pinafores are the garments usually made of print, and may be worn—or, which is more likely—torn, or scorched in ironing. In such cases it is necessary to consider the most expeditious way of repairing the damaged material. A print patch is thought to be the least useful of any kind of patch, but the way in which the damaged part is mended may often with advantage be applied to stuff materials, such as serge, beige, tweeds, &c.

II. Material used.—For practice purposes new material will probably be needed. A small pattern should be selected, which requires a little care in matching. Print used for practical mending should be washed till it is the same shade as the garment.

III. Directions for working.—Two pieces of material are necessary, representing "garment" and "patch." It is well to have the patch a good bit larger than the hole, especially if the pattern be difficult to match.

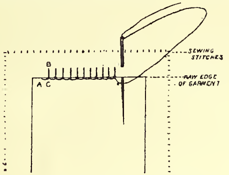
(1) Have a hole to mend.
(2) Keep the garment right side uppermost.
(3) Mark with a pin the selvedge way of patch and garment—the stripe or pattern easily shows this.
(4) Turn down a fold ⅜-inch upon the wrong side of patch, on *one* selvedge side.
(5) Place this fold on right side of garment over hole, exactly matching flower, leaf, stripe or check, or any device; pin in position. Turn the opposite selvedge to match pattern; it may be necessary to fold under more than ⅜-inch. Treat the weft sides similarly, keeping the corners true to a right angle; fix carefully, close to edge. It sometimes happens, especially in common print, that the pattern is not stamped evenly with the threads; therefore, in fixing patch, attention must be paid to matching the pattern in preference to keeping the patch by the threads.
(6) Hold patch to worker, and sew all round on right side, using cotton suitable in colour.
(7) Flatten sewing. (Fig. 96) shows right side appearance.

(8) Turn to wrong side, and cut away damaged material and the superfluous turnings of the patch to within ⅜-inch of the



(Fig. 96.) Patch on right side.

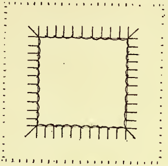
sewing stitches. (Fig. 97.) This will leave a raw-edged square or oblong, which will need over-casting. The embroidery method is usually adopted, which produces a *twist* of cotton at the edge.



(Fig. 97.) Wrong side of patch.

(9) Over-casting is worked thus (see diagram):—Hold patch in position to start at the *top left-hand corner*. Be careful that the stitch does not show through on right side. Run cotton down between folds, and bring needle out at raw edge. (A in diagram.) Hold cotton under thumb—put needle in at B, *i. e.*, nearly ⅛-inch from raw edge, and bring out at C; 8 *or* 10 *stitches to an inch are ample*, as it is quite unnecessary to spend valuable time upon close

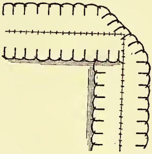
stitches providing the work be neat. Do not pull cotton too tightly, or the raw edge will roll under and form a ridge. Put a diagonal stitch in each corner. A join in over-casting requires care; to finish off old cotton, run needle up at right angles to raw edge in the same direction as the stitch; begin with the fresh cotton by running in the reverse direction, bringing out at the twist of last stitch. (Fig. 98) shows patch complete on wrong side.



(Fig. 98.) Patch complete on wrong side.

This method of working the wrong side is the one usually adopted now. If preferred, over-casting, such as is used for dress bodices may be used.

Another method of working the wrong side is as follows:—Cut away damaged material ⅜-inch from sewing stitches; mitre the corners of the garment; flatten out and over-cast the garment and the patch separately. This necessitates a double quantity of work, and the corners have no protection other than the over-casting, and are consequently insecure, besides the patch being more troublesome to iron. (Fig. 99.)



(Fig. 99.) Another method of treating the wrong side.

Second method of working a patch by which the sewing is on *wrong* side. This requires greater skill in fixing, and if well done repays for the trouble, as the patch is almost invisible. It is worked thus :—

(1) Take the piece of print intended for patch, and place it *under* the damaged part, moving it about till the pattern exactly matches. Be sure to leave a good margin of print. Pin patch and garment firmly together.

(2) Turn garment to wrong side, and fold down ⅜-inch of *patch* right side on to wrong (selvedges first). Remove the pins as necessary.

(3) Make a diagonal crease through each corner of the garment.

(4) Turn to the right side and cut up two of the adjacent creases towards the selvedge side, *just to the corners of the patch*, and not a trifle beyond. The left forefinger on the wrong side will help to limit the point of cutting.

(5) Fold under the thin and worn part of garment so that it exactly matches the pattern at edge of patch.

(6) Sew the edges of garment and patch together on wrong side; next treat the opposite selvedge by cutting and folding in the same manner, and finally the weft sides.

(7) Flatten sewing.

(8) Cut all turnings even on wrong side about ⅜-inch, and over-cast the edges of garment and patch, by the latter method described above.

If a patch be inserted in this way, the over-casting of garment and patch must be done separately, and of course the corners have not the protection they would have, if the patch were sewn on the right side.

IV. Faults liable are :

(1) Pattern of print badly matched.

(2) Patch puckered.

(3) Corners clumsy, insecure and untidy. They should form a right angle.

(4) Turning of patch too narrow.

(5) Sewing stitches too deep and uneven.

(6) Over-casting irregular and too closely worked; raw edge turned under by pulling cotton too tightly.

(7) Joins in sewing and over-casting insecure and untidy.

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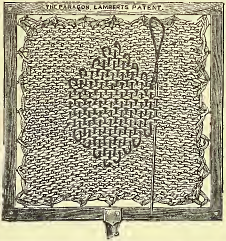
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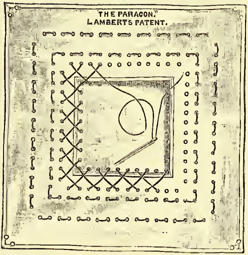
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PART III.

Darning.

INTRODUCTION.

I. Definition of darning.—Darning is that art or method (it is *not in itself a stitch*) by which new threads are supplied in place of the thin or worn-out woven ones, being, in fact, the "prevention and cure" of holes, and to describe it accurately it may be called "hand-weaving," or an imitation of the process adopted in the manufacture of materials.

A definition suited to Standard III. might be:—Darning is the way by which new threads are put in the place of those which are thin or worn-out The Kindergarten occupation of "mat weaving" forms an excellent introduction to darning, as it is illustrative of patterns of darning. Some of the specimens might be used by the teacher to illustrate ordinary weaving, showing the perpendicular or warp threads, and the horizontal or weft threads, crossing the warp at right angles, and forming "the pattern" by taking up some of the warp threads, and then missing some. The canvas is weaving in its simplest form, only crossing the warp threads by passing *over* one thread and *under* the other. In working on canvas new threads are not substituted, but the new threads are darned over those which represent the old ones, imagining that they are thin and need strengthening.

II. Fundamental rules for any kind of darning.

(1) If possible, prevent a hole from coming by strengthening a thin place.

(2) As a rule, begin at the left hand side of the part to be darned; (*a*) because it is easier to see any pattern that has to be repeated in the darn; and (*b*) the hand does not cover up the darning while it is being worked, neither does it rub over the mending, which might fray it, or tend to make it rough-looking.

(3) Do not make a straight edge, such as a square or oblong (see note on page 126), because all the strain has to be borne by one row of loops, or threads, and another weak place will probably arise in consequence. Any shape which is irregular is good, *e.g.*, a wave edge, a diamond, a rhomboid, or octagonal shape. The latter is to be recommended.

(4) Upon washing material leave short loops, to allow for the shrinkage of the mending thread. It is a moot question, as to whether it is better to *cut* the ends of the loops or leave the thread *as a loop*; the latter is mostly adopted in *practical* work.

(5) Use mending thread as much like the original material in colour, texture, size, and stranding as it is possible to obtain.

(6) Be careful that whatever the nature of the darn, the mending must not in the slightest degree strain the material, or cause the least pucker. Holding the thumb upon the thread as it is pulled through the material, is a great help in keeping the work flat,

XXX. (a) NEEDLE-THREADING; (b) MANNER OF HOLDING WORK; (c) POSITION OF NEEDLE.

(a) NEEDLE-THREADING.

Introduction.—Needles used for darning purposes are longer than ordinary sewing needles. This may be easily accounted for, because several stitches are taken upon the needle in darning. As various kinds of threads are used for mending, *e.g.*, cotton, wool, flax, silk, the darning needle is provided with a long eye, in order that it may easily receive any kind of thread. Wool needles with blunt points are sometimes used for darning on web; they are shorter than darners, and have a larger eye.

Method of threading darning needle :—

(1) Take thread in left hand, and hold a short end between thumb and finger.

(2) Hold needle in *right* hand, point downwards.

(3) Put shank of needle to the left of thread, and take the short end of thread between thumb and finger as well as long end (this encloses needle in a loop).

(4) Draw needle out of the loop, which must be held firmly between thumb and finger, and so that a little piece of loop can be seen.

(5) Place eye of needle on to the loop of thread, and draw thread through the eye with right hand thumb and finger.

This method is for angola or any woollen mending ; other threads can be passed through the needle in the ordinary way.

(b) MANNER OF HOLDING WORK.

The material should be held over the first and second fingers, which should be a little distance apart from each other, the third finger and thumb can then hold the work firmly in place.

(c) POSITION OF NEEDLE.

As most of the varieties of darning are formed by rows of threads, worked *from* the chest and *to* the chest, a certain position of the needle is peculiar to each up and down row.

Up row, or from the chest.—Place needle upon first and second fingers of the right hand, and hold in place by the thumb.

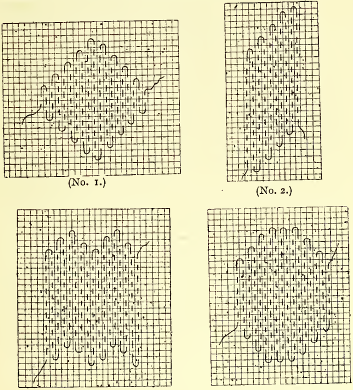
Down row, towards the chest.—Almost as for ordinary stitching, only the thumb and finger cannot be so near the point on account of the length of needle ; the elbow needs keeping up from the side.

XXXI. FIRST PRINCIPLES OF DARNING ON CANVAS.

I. Introduction.—The use of darning on canvas is merely to prepare, and lay a foundation for difficulties that follow upon other material.

(Single thread canvas should be used.)

II. Directions for darning on canvas.—The diagrams (Fig. 100) illustrate various shapes, and any of these may be selected for Standard III. (See note on page 126.)



(No. 1.)

(No. 2.)

(No. 3.)

(No. 4.

(Fig. 100.) Darning on canvas.

These diagrams are only intended to illustrate the shapes *of darns and* not the sizes.

About 15 to 20 stitches might be taken on the needle in the largest part of darns, but this will depend upon the coarseness of the canvas.

No. 4 is perhaps the most practical, but No. 1 is considered the easiest to teach, but is rarely used on a garment.

1st row.—Commence at top left hand side with needle pointing *from* the chest, taking up one thread and missing one, till as many stitches are on the needle as are needed to form pattern. Be sure that the needle takes up the thread *between* the two upright threads of the canvas, so that the stitches are one above the other—leave an end of cotton about a quarter of an inch, and hold the thumb on thread while drawing through.

2nd row.—This will be to the right of the last row and close to it, so that only the line of canvas is left between. The needle will now point towards the chest, and take the thread just above (or below if shape of darn be such) where cotton came out, and so will take up the threads of canvas which were passed over in the preceding row; leave a small loop of cotton, about $\frac{1}{8}$-inch (half the length of little finger-nail to a child), and continue other rows according to pattern. No fastening off is needed, but thread is left hanging and cut even with other loops.

III. Remarks.—Specimens shown to class will help to impress the mind with the principles mentioned above. It is advisable to use coloured thread for canvas darning, besides being attractive to a child, it easily shows up any error in darning. Ermen and Roby's embroidery cotton No. 35 is specially suitable for canvas-darning.

The blackboard and demonstration frame should be freely used to illustrate this lesson to a class. The same canvas may be used for several lessons, if the loops are cut at the bottom, and the threads removed by pulling from the top. Darning on canvas is usually a popular exercise with a class.

IV. Faults which will occur:—

(1) Shape badly formed, and irregular rows.

(2) Loops not of sufficient length, or too long and uneven.

(3) Canvas threads pulled out of position.

(4) Darning drawn and puckered in appearance.

V. *Note.*—Many teachers consider the darn sufficiently difficult for Third Standard if the same number of stitches are kept on the needle throughout the darn, forming either a square or oblong.

Although this method is sanctioned it is not so practical as the shapes shown in Fig. 100.

XXXII. PLAIN DARNING ON STOCKING-WEB AS FOR A THIN PLACE.

(Before working this, each student should be familiar with the previous lesson upon Darning on Canvas.)

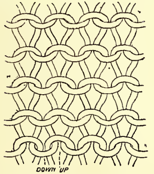
I. Introduction. — When attempting any kind of darn on webbing, it is essential that an explanation should be given of the formation of the stocking-web, as until its make has been clearly understood, a pupil will not succeed in forming a pattern, as the success of any darn on webbing depends upon the right use being made of the loops.

II. Description of web.—The chief feature of the webbing is its *elasticity*, and the aim in darning is to retain this as much as possible.

Stocking-web is a *fac-simile* of knitting, or to express it literally, "knitting is hand weaving." The *right* side of the web represents "plain" knitting and the *wrong* side "purl."

Right side.—(1) The loops appear in columns, also in rows running from right to left, all of which are linked together, as this kind of darn is not worked upon the right side, that description is enough for present needs, and it can be treated with more fully in Swiss darning.

Wrong side.—(Fig. 101). This also consists of :—



(Fig. 101.) Wrong side of web·

(1) **Columns of loops** :— These are very closely connected with each other; one column of these loops has an *upward* curve, the loops being turned *away* from the worker; the next column, either on the right or left, has a *downward* curve, the loops being *towards* the worker. Each of the "up" loops has two "down" ones, which begin from it on either side, and every down loop has two "up" ones coming from it in the same way.

(2) **Rows** of loops going across the web, which seem to form pairs of rows (Fig. 101), curving upwards and downwards alternately; these are also closely joined together.

III. Material used.—In learning the method of darning it is usual to work on a piece of flat web; this should be dispensed with as soon as possible, and the actual "round," as for a stocking, introduced. This increases the difficulty in handling and makes the work more practical, as specimens are only illustrative of real garments. A teacher should aim at accomplishing this result successfully. (The point of economy need not be questioned, as several darns can be worked on the circular piece.) Of course practice is necessary on flat web. Coloured embroidery cotton is best on cotton web for school use, angola mending or any yarn for merino web, worsted for woollen web, knitting silk upon silk web.

IV. Method of holding a stocking for darning.—Position of flat material was described in canvas work; for circular web, place the left hand in the round, and arch the fingers so that the supposed garment can be held between the second and third fingers, and the part to be darned stretched across the space between the first and second fingers; the material will be firmer if the lower part of the thin place be grasped with the thumb and first finger.

Some people advise putting a piece of card or stiff paper under the material to be mended, and holding work as for a flat surface.

V. Directions for working.—Darns for thin places are usually worked on the wrong side; an octagonal is the most practical of the irregular shapes.

1st row.—"Up" column of loops.

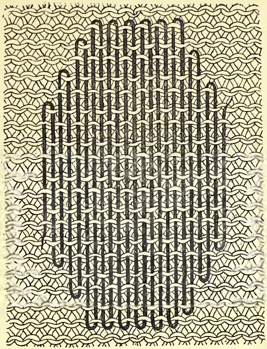
Begin at the left-hand corner of thin place, take one, miss one, &c., till a sufficient number of loops are on the needle to form the side.

2nd row.—"Down" column of loops.

These will be in the *next* column, adjoining the first row, so that a row is not left between. The first loop taken up in second row should be the one *just above* where the thread leaves the first row. Take one, miss one, &c., till one more loop is on the needle than in preceding row, which will bring the thread out one loop below that in first row. Leave loops about $\frac{1}{6}$-inch to allow for shrinkage in washing.

3rd row.—As the first, making the row one loop longer as before.

4th row.—As the second, still increasing (see Diagram, Fig. 102). Continue working thus across the thin place; if preferred the same number of loops may be kept on the needle across the centre, then decrease to match the left hand side.



(Fig. 102.) Plain darn on web.

The loops should be $\frac{1}{8}$-inch in length. The exaggerated appearance of the web seems to make the loops appear somewhat shorter.

VI. Faults met with will be similar to those upon canvas work, and in addition, neglecting to keep the pattern of a plain darn, by combining it with a twill or wave.

VII. Remarks.—To demonstrate darning successfully to a class, a teacher should provide herself with a very coarse specimen of webbing. The "Paragon" web, supplied by Messrs. Cox and Co., 99 and 101, New Oxford Street, W.C., at a cost of 3s. 6d., will be of excellent service. (See illustration on page 120.)

Failing this, a piece of knitting made of thick cotton cord, double Berlin, or fleecy wool, stretched upon a wooden frame, will be a great assistance in illustrating the formation of the web and the manner of darning.

No teacher should attempt a lesson in darning without some means of demonstrating her subject, even if it be but a small piece of knitting tacked on to a slate frame; any trouble spent in this respect will be amply repaid by the increased interest of the class, and the successful results obtained.

XXXIII. MENDING A HOLE IN STOCKING-WEB.

(Common Method.)

I. Introduction.—This plan merely forms a lattice work over the hole, thereby filling the gap, and making no attempt to imitate the pattern of the web. Practice should have been given in canvas darning, and upon webbing as for a thin place, before working this specimen.

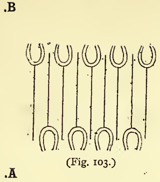
For teaching purposes, new material has often to be used—the coarser the better.

For darning on fine web, such as ordinary merino, or cashmere stockings, a slightly different manner of darning is adopted, although it is the same in principle.

II. Coarse web darning.—In order to give an idea of the method of forming the strands over a hole, it is necessary to actually *cut away* a portion of the web, and not merely to snip one loop and stretch the hole about over the thumb, which is not sufficiently realistic of the holes that usually occur in stockings. The loops may become disconnected, and the hole appear larger than it really is, but it frequently happens that some portion of the tissue is completely worn away, and needs supplying. Unless material is actually cut out in new webbing, it does not teach the mending of a fair-sized hole, such as usually happens in children's hose.

III. Preparation of material for darning.—On the right side of new web make a perpendicular slit, *nearly* ½-inch (not more) in length, and another at right angles to this, across about *four or five loops*; cut away the little piece of material enclosed by these slits. This is *quite* large enough for a darn suited to Standard V. Still keeping the web upon the right side, clear away with the needle any little fluffy ends that may be in the loops, so that each loop is clear and distinct. The loops of the cotton webbing show no tendency to run down and form ladders, as woollen web might do: therefore it is hardly necessary to draw the loops together, but if it be preferred to do so, use an ordinary sewing needle, and lightly connect the loops, being very careful that the hole is not drawn in the least degree, or the sides will pucker.

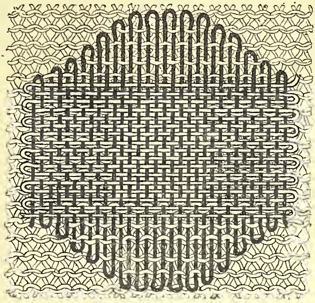
IV. Method of darning.—All round the hole a thin place is to be imagined, which it is necessary to strengthen. Hold the material wrong side uppermost in the position described as for a thin place, About ½ an inch to the left of hole, and ½-inch below, is ample for strengthening purposes. Commence at A in diagram (Fig. 103), with the up loops; take one, and miss one for ½-inch above the hole. B in diagram. Continue working as for a thin place until the hole is reached; leave loops ⅙-inch,



(Fig. 103.)

It must be noticed that the loops at the bottom of the hole are *not opposite* the loops in upper row, but loop *faces space*.

In crossing the hole if the needle passes *through a loop in the upper row*, it must follow to corresponding *space in lower row*.

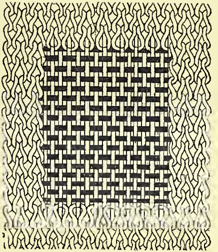


(Fig. 104.) Hole complete on wrong side.

The eye can easily tell which of the loops of the thin place, above and below the hole, it is necessary to take up, in order to keep the pattern. Be very careful that the needle passes *through* each loop, so that it is really connected again by a strand, with the loop to which it belongs on the opposite side of the hole. (Many teachers prefer using the *eye* of the needle for this purpose.) It is wise every few rows to look at the right side, and see that the needle has passed clearly *through each loop*, as the loops are inclined to fall outwards on the right side, and so the needle is likely to split them. Be careful not to contract the hole in stranding across it. It is well to increase each row in length till about $\frac{1}{3}$ of the hole is stranded, then work over the centre without increasing, and decrease on right hand side to correspond with the left. This completes the warp darning, and forms a stranding upon which to work the lattice.

V. Crossing the hole.—Bend the work round so that what previously formed the top and bottom, is at the right and left hand, respectively. The hole will need strengthening for a good $\frac{1}{4}$-inch at each side; the mending thread alone should be taken up. It will be seen that the plain darn at the sides of the hole has a double row of loops of the web showing. If Fig. 102 be held sideways at a distance from the worker, this double row of loops can be easily seen. The strand which should be taken up now is the one *between* these two rows. Begin at the required distance from hole, and take up one strand and miss one all across the darn; in second row, take up the thread missed in preceding row, and so on, catching in any jagged edges, and taking care that in crossing the hole, the lattice is perfectly formed by taking up each alternate thread. (Fig. 105.) Some people advise starting the crossing from the middle of the hole.

If sewing cotton has been used to connect the loops, it should now be cut and withdrawn.



(Fig. 105.) Hole complete on right side.

VI. For fine web darning.—When looking over socks and stockings returned from the laundress, it is not unusual to find besides several thin places caused by friction with the boot, a few holes, which may have been the result of one loop having given way, run down, and so formed a ladder.

A hole of this description had better be treated as follows :—

On the right side take up the ladder according to one of the methods described in Lesson XL., and draw the hole together with sewing cotton, "lacing" it, as it were, so that the loops are as much as possible in their original position —be very careful that no puckering is caused—turn to wrong side, and darn as for a thin place.

A hole of this kind rarely requires crossing, or only slightly.

Occasionally in children's stockings one meets with a "huge gaping space" with "bits" of the broken tissue hanging loose. It is a help towards getting the stocking shapeable, if a piece of stiff paper, or card, be placed in the stocking, as puckering will be less likely while lacing the hole—do not cut the loose ends, but draw them straight in place, while connecting the sides of the hole. Fabric worn away in this manner should be supplied as in the directions for darning coarser web.

Upon very fine web, two loops may be taken on needle and two missed or even more.

Some people use a shaped ball, made of wood or bone, and employ it as a substitute for the hand inside the sock or stocking, for the purpose of having a firm substance to darn upon.

VII. Points for criticism :—

(1) Mending thread either too coarse or too fine for the web, so that it makes a botch, or is too weak to answer its purpose.

(2) Hole itself badly prepared; conspicuous by its size; being too large, or not of sufficient size to show a fair amount of darning.

(3) Thin web surrounding hole not sufficiently strengthened, or too much darning in comparison with the size of the hole a common fault).

(4) Irregular pattern in plain darning.

(5) Neglecting to pass the mending thread *through* the loops, when stranding across the hole.

(6) Stranding too loose or puckered.

(7) Loops at edge of darn too long, or omitted entirely.

(8) Shape of darn unsuitable to the size of hole.

(9) Crossing uneven, and the lattice-work not kept correctly to the proper threads.

(10) General appearance puckered or bulky.

VII. Remarks.—The "Paragon" apparatus (see page 120) is the best means of demonstrating the method of mending.

XXXIV. CROSS, DIAGONAL, OR BREAKFAST CUT.

I. Introduction.—The above are the names by which a cut in damask linen is usually known. It is generally the result of a careless use of a knife, which cuts both warp and weft threads, and in consequence requires careful darning. It may occur on a tablecloth *at any angle*, thus :—

/ . \ . ~ . / . ⁄ .

It is sometimes the diagonal of a square, hence its name. The darning should be practised with the cut in various positions, as one occasionally hears that a pupil does not know how to start about the mending unless the cut is made a certain way. The usefulness of this kind of darn is often questioned by teachers, and there are many who would hail the day if it were abolished from the needlework curriculum. It is said that "it is of no use to girls in after life." That these kinds of cuts happen sometimes everyone will allow, and also that it is necessary to repair the slit made, or frequent washing will soon make an unsightly hole. Good housekeepers take great pride in keeping table linen neatly repaired, and even if a busy mother cannot find time to mend the linen herself, she will feel the advantage of "knowledge is power," if she can at least superintend and teach another how it should be done. Another objection often raised against the working of a cross-cut darn is "that it is likely to injure the eyesight." If it be taught by a single thread process on fine linen, where the darning is made the chief feature, and the repair of the cut counts for nothing, no doubt this may be true; but a darn of this kind is not required, but such an one as is suitable to the actual cut in a cloth. The darn for Standard VII. on coarse linen is only a preliminary for the damask, just to teach the correct method of working a darn for this kind of cut. Children would value it more highly if permitted to try their skill on damask, when successful on coarse linen. The difficulty in obtaining old table linen may be met, by buying very coarse, new material, and washing it—the cost would be trifling—and the practical value of the lesson so much enhanced.

II. Material needed.—The method of working is best taught on single thread canvas with an imaginary cut, which may be pencilled—then upon coarse linen or Saxony cloth *with a cut*, and finally upon table linen. Any kind of darning cotton will answer the purpose for canvas work, but proper linen thread should be used for the damask. It is glossy and is called "flax" or "flourishing" thread. It can be bought in various sizes suited to the threads of the linen. Messrs. W. and J. Knox's linen thread is specially adapted for darning purposes: coloured thread is recommended for teaching, and can be dyed any shade and size to order (see page 225).

III. Directions for working.—The darning is worked upon the wrong side, and is easier to manage if a piece of paper be placed under the cut. Some people advise drawing the lips of the cut together with very fine cotton before working the darn, this is optional, but if it be done it should be as follows:—Put the needle in about $\frac{1}{6}$-inch from raw edge, pass it under the cut to $\frac{1}{6}$-inch on the other side of the cut; insert needle a little distance from the place where thread comes out, and pass needle to the other side of cut; by this means all the raw edges are kept upon the *wrong* side. If preferred the edges may be drawn together, as recommended *for thick material* on page 140. These threads can be cut out when darn is completed. It is clear that as the warp and weft threads are cut, the mending threads supplied must be darned warp and weft way.

There are several methods of planning the shape of the darn:—

(1) By folding creases, generally considered the best.
(2) Marking the shape of the darn with pencil.
(3) By the aid of pencilled dots.

The first is the most practical and the simplest; pencilling is not advisable on material, especially for children's use.

To arrange the folding.

(1) Make a crease, weft way of the stuff, and quite straight, about $\frac{1}{4}$-inch above the end of the cut (Fig. 106). Crease (I) in diagram.
(2) Make a second crease at right angles to the first fold, $\frac{1}{4}$-inch from the other end of cut. It will depend upon the slope of the cut—right to left, or left to right—as to which way this crease is made, whether at the right hand side or the left, but it must always be folded so that the *angle formed by the meeting of the folds* (Letter A in diagrams) *is the apex of the triangle of which the cut is the base.* If this be clearly understood a cut in any position can be correctly darned. It should be noted that the starting point is *opposite* the cut, and not on a line with it, as it would be if the *second* crease were made at the wrong side.

The diagrams will illustrate the folding. (Fig. 106 shows the preparation of a cut from "left to right," and Fig. 107 a cut from "right to left.")

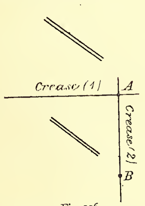


Fig. 106.

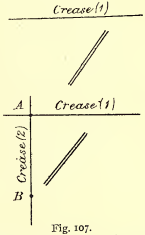
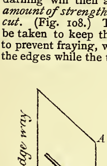


Fig. 107.

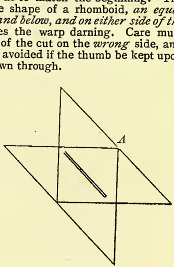
Begin to darn at the apex A. Take two threads upon the needle and miss two. (If working on damask, where threads cannot be counted, take a small piece of material and pass over the same amount.)

When letter B is reached—which can be found by continuing the direction of the cut on to the crease in the mind's eye—count the number of stitches on the needle, and take exactly the same number again below B (supposing there are 7 stitches from A to B, 14 stitches will be the number in all for the first row).

The second row will begin 2 threads from the first row, and 2 threads higher up, *slanting in the direction of the cut*. By this means the material which was passed over in the preceding row, will be taken on the needle now. Leave *short* loops, ⅛-inch, to allow for the shrinking of the mending thread. There should be the same number of stitches on the needle in every row. Darn across the cut, and continue the strengthening for the same distance beyond the other side of cut so as to match the beginning. The darning will then appear in the shape of a rhomboid, *an equal amount of strengthening above and below, and on either side of the cut*. (Fig. 108.) This completes the warp darning. Care must be taken to keep the raw edges of the cut on the *wrong* side, and to prevent fraying, which may be avoided if the thumb be kept upon the edges while the thread is drawn through.



(Fig. 108.)

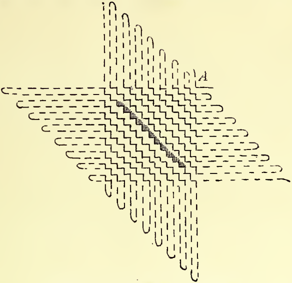


(Fig. 109.)

The material should now be turned round, and darned across the weft way of the stuff.

(Fig. 114), on page 142, shows different ways of arranging the weft darning. The paragraph above the diagram gives an explanation of the method. The first plan is shown on the cross-cut (Fig. 110).

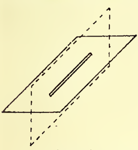
Commence at A, *i.e.*, *exactly the same place* as for the warp darning, taking the same number of threads (or amount of material) on needle, and leaving the same between each row. Be careful that the needle takes up the *material*, not merely the darning thread, so that the stitches show through clearly on right side. When crossing over the cut, the strand which is taken up in one row must be passed over in the next, so as to form a lattice work, just as if mending a hole in a stocking. When the weft darning is complete, the shape of the darn and its general appearance should be as shown in (Figs. 109 and 110). It will be noticed that the darning has formed two triangles, the apex of one fitting into the base of the other with the cut running in the same direction as the bases.



(Fig. 110.) Darn complete on wrong side.

The darning is sometimes worked in the shape of two triangles instead of as described. The result is the same.

IV. Faults met with are :—



(Fig. 111.)

(1) Unsuitable mending material, both in texture and quality.

(2) Material folded incorrectly, so that the darning is the wrong shape, according to the direction of the cut.

(3) Darning too closely worked.

(4) Stitches not kept distinctly and evenly to warp and weft threads.

(5) Insufficient crossing over the cut, or want of strengthening at the ends.

(6) Rough edges of cut frayed unnecessarily in working, and ends not kept on wrong side.

(7) Weft thread crossing taking up only the new warp thread, instead of the original material.

(8) Loops not left, or too long, so as to render darn unsightly.

(9) Darning thread drawn too tightly, and so producing a puckered appearance.

V. Remarks.—Another form of darning a cut is shown in (Fig. 111). The dotted figure shows the outline of the darning. This method takes much less time to darn, and the amount of mending is quite sufficient protection to the edges of the cut; on this account it recommends itself for household purposes.

XXXV. TREATMENT OF A THIN PLACE ON WOOLLEN MATERIAL, *e.g.*, FLANNEL, TWEED, SERGE, &c.

I. Remarks.—A thin place occurs when the "nap" wears off the fabric, leaving the threads bare. A garment may be made to last much longer, and look neater, if darned as soon as the weakness is seen, as the object of the darn is to prevent a breaking of threads in the material. For the names of garments, with the parts that need darning in this way, see lesson on "Flannel Patch," heading II. Instead of "patching" read "darning."

II. Material used for mending.—"Wool upon wool" is the principle, therefore Angola, Shetland, or Andalusian wools are all suitable, of course used singly, and if too thick the strand may be untwisted. Flannel is sometimes darned with silk, or flax thread. If dress material has to be repaired, the ravellings of the stuff form an excellent mending thread, the darn will then be almost invisible.

III. Directions for working.—The method employed is similar to the canvas darning of Standard III. (Lesson XXXI.). It is advisable to read these instructions before commencing to darn. Any of the shapes mentioned in canvas darning are suitable. An oval shape is also recommended. As a rule it is best to darn parallel with the selvedge, and so strengthen the threads which bear most of the strain. The darning is worked upon the wrong side. Two threads (three, if fine material) may be taken on the needle, and one or two threads left between each row; in the second row, the material passed over in the preceding row must be taken up. Even distances can be gauged by the eye when the first few rows are started, as upon dress material it is impossible to count threads. Upon serge, or twilled flannel, a twill darn would look well.

IV. Points requiring attention are :—

(1) That the darning extends sufficiently over the thin place, and that it is upon the wrong side of the material.

(2) That straight edges are avoided.

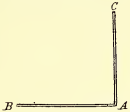
(3) That loops are left about $\frac{1}{8}$-inch in length.

(4) That the darn is not puckered, and that it presents a neat appearance when done.

XXXVI. THREE-CORNERED TEAR, HEDGE TEAR, OR "CATCH" TEAR.

I. Description.—The above are all names for the same kind of rent. This tear usually happens in dress material, though sometimes in linen or calico. It is caused by catching the garment on some sharp surface, such as a nail or edge of a desk (hence its importance to teachers).

It is generally the shape in (Fig. 112), the corner at A being often jagged and ravelled, as this is the place where, in tearing, the strain was the greatest. As a rule, the material tears *with the threads*.



(Fig. 112.)

II. Material used.—For the sake of giving an exact idea as to method of mending, it is well to practise the darning upon canvas without a slit, so that the worker may get familiar with the position of the threads; then upon Saxony cloth or coarse linen with a tear; and ultimately upon dress material.

The mending thread will depend upon the kind of stuff which needs darning. Darns upon any linen fabric should be worked with flax or flourishing thread, about the same size strand as the material is made of. Fine embroidery cotton is also suitable. On woollen material fine Angola or silk exactly matching in colour may be used, but if any difficulty arises in matching the shades, as in fancy fabrics, the ravellings of the stuff are excellent for the purpose, if a sufficient length can be obtained. A darn can be exquisitely managed by this latter means and rendered almost invisible; in fact, it is to be preferred to any kind of mending material.

III. Preparation for mending.—For practice purposes, where the tear has to be made, it is best done by putting the point of the scissors into the material, making a slit about $\frac{3}{4}$-inch in length, and another at right angles to the end of the first one. It is advisable to fasten the material to be darned, wrong side uppermost, either upon a piece of paper or card; this makes a firm substance to darn upon, besides, puckering is less likely to occur. It is sometimes well to gently draw the edges of the tear together, so that the threads may become as continuous as possible. This is an advantage, should the material be likely to fray much.

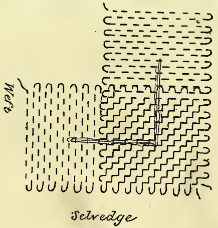
Use very fine sewing cotton, a hair from the head is an excellent substitute on dark dress material being strong and yet fine.

There are two ways of drawing edges together, according as the material is thin and loose, or of a firm texture.

For thick material.—This method is similar to (Fig. 116), only the stitches should not be so close together. The needle is brought out at about $\frac{1}{6}$-inch from the edge and then inserted *into the slit* and brought out $\frac{1}{6}$-inch from the edge on the opposite side of the tear—pass needle again into slit and so on.

For thin material.—Begin at the left hand side, about $\frac{1}{6}$-inch from the edge, pass the needle to the back of the work, and bring out $\frac{1}{6}$-inch on opposite edge—hold the left thumb upon the raw edges while drawing the cotton through—insert the needle a short distance to the right from where the cotton came out, and bring out on the opposite edge on a line with commencement, and so on. This method of drawing together has the advantage of keeping the frayed edges up on the wrong side, that is, on the darned side. The stitches can be removed when darn is finished.

IV. Method of mending.—Begin the darning selvedge way of the material, and hold the tear so that the warp threads lie along the finger. The shape of the darn is shown in (Fig. 113A).



(Fig. 113A.)

(1) Commence at the left hand side about $\frac{3}{8}$-inch to the left of B (this distance is usually sufficient protection), and about $\frac{3}{8}$ inch above the tear. Take two threads and miss two in a line with the threads of the stuff for about $\frac{3}{8}$-inch below the tear. Be very careful to keep the thumb upon the raw edges while the thread is drawn through, as this will help to prevent ravelling as well as keeping the darn flat.

(2) Leave two clear threads between each row, and take up in the second row the threads missed in the preceding one. On materials where threads cannot be easily seen, take up a small piece of material, and pass over a proportionate amount, leaving the same between each row. This plan is almost compulsory on dress fabrics.

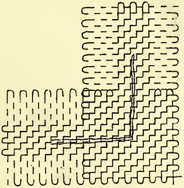
(3) On washing material leave loops about $\frac{1}{8}$-inch in length to allow for shrinking. This amount is hardly necessary on a non-washing dress material, but just sufficient length so that the darn is kept flat, and without the least sign of dragging.

(4) Continue darning thus till about three-quarters of the way across the tear. Unthread the needle.

(5) Turn work round and darn the weft way of the stuff. Begin at the same distance from the end of the tear as in the previous darning, keeping the same proportion on the needle as before. Work three-quarters of the way over the tear.

(6) Now go back to the selvedge side and resume the darning, carrying it beyond the tear till it is even with the outermost edge of the darning on the opposite way of the stuff.

(7) Complete the unfinished side, and continue as far as the edges of the other darning threads. When working over the slit, the strand of cotton must be taken up on the needle in one row, and passed over in the next, as in filling up a hole, and any loose threads of material darned into place so that they again form part of the original weaving.



(Fig. 113B.)

A slightly different plan for an L-shaped darn, and which is specially recommended for *thin* material is worked as follows :—

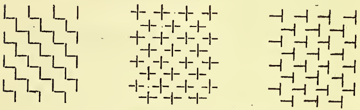
Carry out the directions above to the end of paragraph (5).

(6) Resume the darning of the selvedge side and carry the thread beyond the limit of the tear, till it is even with the outermost edge of the darning on the opposite way of the stuff.

(7) Darn the weft side similarly, following the same plan.

The diagram (Fig. 113B) shows exactly how the working appears. When finished the double darning will extend over the length of the *sides* of the tear as well as at the corners.

The pattern may form in crossing either of the ways indicated in (Fig. 114). The first method makes a series of steps, in this case the needle goes *into the same place* with each way of the darning, whereas in the other plans, it either *passes over or under the threads or by the side.* It will be necessary to decide which plan to adopt, before beginning the cross darning.



(Fig. 114.) Different methods of crossing a darn.

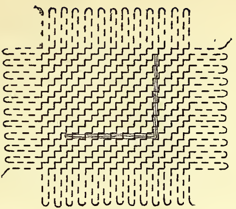
When the work is complete the double darning will come just where it is needed most, viz., at the jagged corner, which is the weakest place.

Darning a portion of *each side* alternately, keeps the mending flatter and the corresponding edges of the tear in place, and so makes a more successful darn.

V. Finishing off.—Remove the work from the paper, and cut off any loose threads that there may be, and if noticeable take out the stitches that held the fractured edges together. The appearance of a darn on dress material is greatly improved, if a damp cloth be laid upon the wrong side of the darn and a warm iron pressed upon it; this cannot be done on linen fabric, but smacking the darn smartly on the palm of the hand, and then placing it between the leaves of a book, is generally effectual in flattening it.

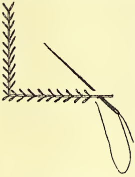
Another method of darning a hedge tear is to form two squares or oblongs of darning over the edges of the tear; this process involves a deal more darning than there is any necessity for, consequently takes longer to darn, is no more effectual, and renders a tear on dress material clumsy, as it makes much of what is really very little, and which should be as invisible as possible.

(Fig. 115) gives an illustration of the shape.



(Fig. 115.) Hedge tear.

Another method of mending a tear in thick woollen material when there happens to be a clean cut, is shown by (Fig. 116).



(Fig. 116.) A method of mending a cut in cloth.

It is similar in principle to the old-fashioned German seam, which is a very strong way of joining two selvedges or edges, which are not likely to fray much. The threads cross between the edges, and so the join produced is perfectly flat, and if strong, fine thread be used, the mend is nearly invisible after damping and ironing.

A worn place in the elbow or the under arm of a dress, can be neatly mended by having a piece of the same material laid under it to strengthen it, and then any jagged ends firmly darned down. It is best to unpick the seam of the sleeve and place the new piece between the lining and the fabric, darning the two materials neatly and flatly together, and then stitching up the seam again.

The knees and seats of boys' trousers may be treated in the same way.

VI. Points requiring attention are :—

(1) That suitable mending thread be used.

(2) That the darning extends sufficiently over the weakest part of the tear.

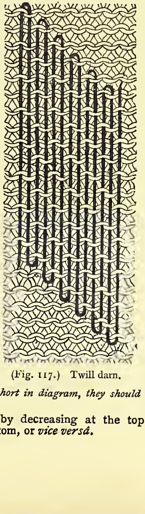
(3) That all loose ends are drawn in place.

(4) That the darn is not puckered nor clumsy, but the tear effectually mended, and that the work presents a neat, flat appearance when complete.

XXXVII. VARIETIES OF DARNS ON WEB, VIZ., TWILL, WAVE, BIRD'S EYE.

TWILL DARN.

I. Introduction.—This is a simple and very strong way of darning a thin place, not only on webbing, but upon any material which has a twill pattern. (Fig. 117) gives an illustration of the method of working. The same number of loops are kept on the needle throughout, by decreasing at the top of the darn and increasing at the bottom, or *vice versâ*.



(Fig. 117.) Twill darn.

Loops appear rather short in diagram, they should be $\frac{1}{6}$-inch in length.

II. Directions for working.—According to (Fig. 117)—

- **1st row.**—"Up" column of loops. Take one, miss one, according to size of the place to be darned.
- **2nd row.**—"Down" loops. Begin by taking one loop below the preceding row, keeping the same number of loops on the needle as before.
- **3rd row.**—Take one loop lower, and so on.

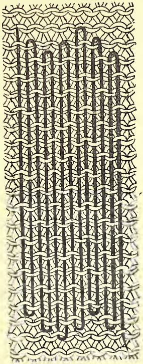
It will be seen that the loops in the same horizontal line are taken up only in every fourth row.

It is a pity that this darn is not more often used, as on account of its strength it is to be recommended and it is an easy pattern to follow.

WAVE DARN.

This is similar to the twill, perhaps slightly more difficult.

Work a few rows (say five) as for a twill darn; then reverse the order of the slope of the loops by taking the next loop, either above or below where thread came out, according to the direction of the

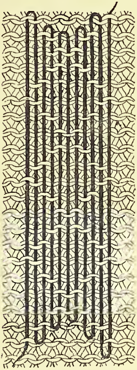


(Fig. 118.) Wave darn. (See note to Fig. 117.)

first series of rows; work *one* row less than in first wave (in this case four); change again and darn as for first slope, and so on. The diagram will illustrate this. (Fig. 118.)

BIRD'S EYE.

This darn is rarely used, but the pattern is not difficult to master if worked on coarse webbing. (Fig. 119.)



(Fig. 119.) Bird's eye darn. (See note to Fig. 117.)

Directions for working this in illustration are as follow:—

1st row.—Take one, pass four, &c., take one.

2nd row.—Take one, pass three, *take two, pass three; repeat from,* take one.

3rd row.—Take one, *pass two, take one, pass one, take one; repeat from.*

4th row.—Take one, pass one, *take one, pass two, take one, pass one; repeat from*, take one.

5th row.—Take two,* pass three, take two; repeat from*

6th row.—As the first.

7th row.—As the 5th, and so on, working backwards.

Remarks.—These darns are all suitable for strengthening the heels and toes of new socks and stockings, commonly called "running."

If treated in this way they will last twice as long before needing repair.

Heels.—For strengthening a heel, start at the seam loop, and make this the longest line of darning, decreasing gradually on either side. The ball of heel should also be darned.

Toes.—Begin at left hand side of toe, increase gradually over the centre, and decrease on right hand side to match.

It is well to darn both upper and under part.

Knees.—It is time well spent if the knees of boys' stockings are run before the web gets thin.

XXXVIII. SWISS DARNING.

I. Definition.—Swiss darning is that method of strengthening a *thin* place (not a hole) in stocking-web material, by exactly covering the loops of the original knitting or weaving, with a thread which thickens the loops, while at the same time preserves the elasticity of the web, and renders the mending almost invisible.

It is preferable to the ordinary darn on account of its neatness and strength, and with a little practice can be as quickly worked, especially on moderately coarse webbing.

II. Articles upon which a Swiss darn is suitable.

(1) Any part of a knitted sock or stocking, chiefly knees and legs of boys' stockings, and heels if shoes are worn.

(2) Elbows of jersey suits or bodices.

(3) Knitted or woven petticoats and vests.

(4) Gentlemen's pants and jerseys.

(5) The sides of a knitted or woven patch may be strengthened by this means.

(6) The fingers of knitted gloves.

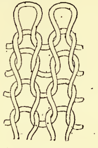
III. Material used.—In order to make the darn almost imperceptible, it is necessary to have the mending thread as much like the thread of the article to be mended, both in colour and texture, as it is possible to obtain it. It is an advantage, perhaps, if it be a *trifle* finer, as the darn will be less bulky.

Cotton mending should be used upon cotton web, and wool upon woollen web. Contrasting colours are preferable for learners. A wool needle is recommended, being less likely to split the threads of the loops, but darning needles can be used.

IV. Description of the webbing.—Before commencing a darn of this kind, it is necessary that the formation of the web be understood, otherwise there may be a difficulty in working a Swiss darn properly.

The *wrong* side of the web was dealt with under the heading of Plain Darning (page 127).

On the *right* side, the loops appear in *columns* or ribs, also in *rows* running from right to left. If any loop in the mass of web be examined by itself, it seems to consist of two sides (often compared with little leaves) meeting in the loop above and below it. It takes two of these leaves to form one loop, which slopes *upwards*, but if another half loop be added, so as to make three horizontal leaves, a *downwards* loop is formed as well (Fig. 120), so that each loop in completing itself forms part of another.

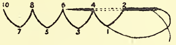


(Fig. 120.) Right side of web.

V. Method of working.—Swiss darning is worked upon the right side, and always horizontally from right to left.

To commence.—Leave a finger-length of thread on the wrong side, which must be darned down neatly when the work is finished. Do not pull the thread tightly.

The loops mentioned above are represented in the diagram by slightly curved lines, which, for simplicity, are numbered. (Fig. 121.)



(Fig. 121.) Diagram of a row of webbing.

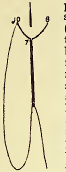
(1) Bring the needle out in No. 1 at the right hand lower corner of the thin place, being the *bottom* of the *upward* loop, and one of the points where the leaves seem to meet.

(2) Follow the *upward right hand slanting thread*, 1, 2—insert the needle at 2, and take a horizontal stitch under the threads or rib to 4 (Fig. 121). This will cover *half a loop*.

(3) Put the needle back in the same place from which the thread started, and take another horizontal stitch from 1 to 3. This covers the second half of the loop.

(4) In at 4 out at 6 ; in at 3 out at 5 ; and thus across the thin place. Be careful to finish the row with a *complete* loop, not merely a half one. It will be seen that the needle goes into each loop *twice*. The thread on the wrong side will appear somewhat like two lines of running.

(5) **To turn a corner.**—Put the needle in as though about to make another horizontal stitch; but instead of so doing point the needle perpendicularly upward, taking up one strand *in the middle* of the last stitch, thus (Fig. 122); draw through and push the loop together with the thumbs, when the thread will be seen in the centre of the loop in readiness for the next row. Turn the darning completely round, so as to be able to work again from *right to left*, with the finished row uppermost. The second row will begin with a downward row of loops. Be sure that the needle goes *exactly into the middle* of the loops in the previous row, so as to cover the fabric entirely, and not to permit the original web to show through. Turn work for the third row, which will be like the first, and locked into the second.

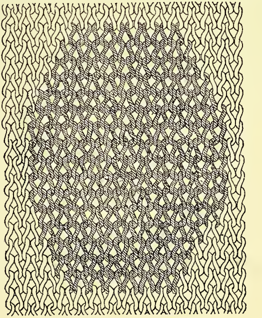


(Fig. 122).
Turning a corner.

To finish.—Pass needle to wrong side, and darn down all ends as for plain darning.

The darn may be begun at the top and worked downwards. In this case the *down* part of the loop will be taken first instead of the upward thread, as shown in (Fig. 121).

It is well to work several rows for practice; but as soon as familiarity has been gained with the webbing, and the stitches



(Fig. 123.) Swiss darn complete.

can be freely worked, and the corners accurately turned, irregular figures should be practised, viz., diamond, rhomboid, hexagon, octagon, lozenge or coin shape, &c., as any darn, to be successful, should never have a straight edge, which would cause an undue strain on one set of already weak loops. The eye will soon detect the place where it is necessary to bring out the needle, in order to produce the required irregular shape.

(Fig. 123) shows a darn complete.

VI. Points needing care.—

(1) That the darning thread is suitable, and that it exactly *covers the original web.*

(2) That the thread is kept moderately loose, so as to preserve the elastic character of the web, and to prevent any puckering.

(3) That each loop is locked in the last row of loops.

(4) That the loops in the same horizontal line are kept even throughout the row.

(5) That all ends are darned in neatly on the wrong side.

XXXIX. GRAFTING.

I. Definition.—Grafting is that method by which two pieces of webbing are connected together in such a manner as to produce an invisible join, if the thread used be of the same size, colour, and texture as the original material.

To graft, means to insert a foreign substance in order to strengthen or support, and it is in this sense in which it is used in needlework.

II. Uses to which it may be applied.—It can only be worked upon webbing, either knitted or woven.

(1) Joining a new foot, or a portion of one, to an old leg.
(2) Finishing off the toe of a knitted sock or stocking. This is an exceedingly neat method, as a ridge is avoided, and the toe rendered so much more comfortable for wear. The toe would be grafted by pulling the needles out as the stitch is worked.
(3) Repairing gentlemen's under-garments, such as pants and vests.
(4) Joining a new sleeve into a jersey suit.
(5) Securing the top and bottom of a patch, which might be placed in any of the above garments.
(6) Any instance in which it is necessary to join one set of loops to another.

III. Preparation of material.—Ravel out the thread of both pieces of web, until the loops are perfectly clear and distinct, so that they could be picked up with a knitting needle. If the sides of the web are intact, such as they would be in a patch, or in the repairing of a ladder, the upper row of loops will have *one whole* loop less than lower row, but to compensate for this there will be a half loop at each end of upper row.

A wool needle is recommended for use, being less likely to split the loops.

IV. Position of work.—Grafting is worked upon the right side of the garment, and from right to left.

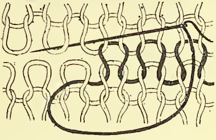
Hold the pieces, one above the other, over the first finger of left hand, so that the loops face the worker, and that the *loops* in the lower row are exactly opposite the *spaces between* the loops in the upper.

V. Directions for working.—**Commencement.**—As web is such elastic material, it is advisable to leave a finger length of thread, and secure this when work is done, by darning the end neatly on the wrong side; any attempt at making a strong beginning often results in dragging the loops out of place.

The stitch.—Bring needle out from the back through the middle of the first loop in lower row; take two loops in upper row horizontally, back to back (the first loop taken should be the one just on the right hand side of the lower loop, and if the sides are intact it will only be a half loop), the two *inside* parts of the loop will be *on* the needle, and the two *outside* parts *under* it. Draw through gently so as not to disarrange the loops; now take two loops in lower piece in just the same manner—the first loop taken in this row should be the one in which the work was started—the needle is thus inserted in each loop *twice*.

Continue working alternately upper and lower row, the last loop of the preceding stitch in each row being the first one of the next.

(The diagram (Fig. 124) illustrates the stitch in detail.)



(Fig. 124.) Grafting in progress.

Fastening off.—Darn end up and down on wrong side, also the thread left at commencement.

To graft a purl loop in the lower row to another purl loop in upper row.—This requires great care. It is sometimes necessary to work this in a calf of a stocking when connecting a seam stitch.

If the purl loop in *upper* row be examined, it will be seen that it consists of *two half* loops, which the grafting thread must connect and form into one.

It is worked as follow:—Completely finish the plain loop before the seam stitch; insert the needle into the purl loop *from the front* pointing it to the N.E. as it were, and at the same time take up *from the back* the right hand *half* of purl stitch in upper row—draw through carefully, turn needle round so that it points to the S.E., and insert it downwards into the *left* hand half of purl stitch in upper row, at the same time bringing needle *from the back* through the purl stitch in lower row. (These half purl stitches are very much inclined to fall back quite behind the other loops, therefore it is as well to look at the wrong side at this stage, and see that the newly grafted purl loop corresponds with the other loops, which it will do if the directions have been followed.) Put the needle into the first plain stitch after the seam loop in the lower row, from the back, and then to the right hand side of the plain loop in the upper row, and go on as usual.

Difficulties to surmount are :—

(1) Thread drawn too tightly, or left so loose that the loops do not match surrounding web.

(2) Incorrect formation of loop.

(3) Untidy fastenings.

XL. TAKING UP A LADDER IN STOCKING-WEB, OR MENDING A BREAK FORMED BY A DROPPED STITCH.

I. Description.—What is known as a "Jacob's ladder" is caused by—

(1) The breaking of one or more loops, which drop bar after bar rapidly until they form an endless number of strands one above each other, with a loop or more at the bottom, or "on the first rung," so to speak.

(2) Dropping a stitch in knitting, and letting the loop run down.

(3) Faulty weaving by the machine, *i.e.*, slipped loops. This is generally rectified in a way, before the web leaves the factory.

II. Method of picking up—

(1) A crochet hook,

(2) A pair of knitting needles, or

(3) The head of a pin or darning needle, can all be used for this purpose.

Hold the right side towards worker. Put the left hand into the stocking, keeping the ladder over the forefinger.

If a crochet hook be used, insert the hook in the loop, draw the bar just above it through the loop, and so on till each bar has been treated in turn. The head of a pin may be used in the same way. This plan is similar to working "chain" in crochet.

To use a knitting needle, insert the needle into the loop, as for ordinary knitting, with the right hand side of loop, *over* the needle; lift up the bar just above the loop on to the needle, and draw the loop *over* the bar from *left* to *right*, which will form a new loop, and continue this till all the ladders are used up. This is to form a "plain" loop. A "purl" loop is slightly different; it may be either picked up on *wrong* side, like a plain loop, or if held right side to worker, the bar must be on the needle first and then the loop; draw the loop over the bar from *right* to *left*.

The darning needle may be used if the above-named implements are not at hand. Put the eye of the needle from the worker, upwards through the loop, then pass the needle between the first and second bars, and bring out in the loop again, with the first bar on the needle as a fresh loop. Draw out the needle and insert it again as before. This plan is more likely to split the bars unless very carefully done, but it is a ready method. Whichever way has been chosen for picking up the ladder, when all the bars are drawn through, the loop should be grafted in its place, and a few rows of plain darning, or Swiss darning, preferably the latter, worked around the grafting for strengthening.

To fasten off, run up and down the loops for a few rows on wrong side. If several loops are dropped it is well to place a pin in those not under treatment, to prevent them running further. Begin with the right hand loop, and when that is drawn up to place, fasten it by a pin or thread while the other loops are picked up. On a very fine stocking it will be almost impossible to pick up the ladders as described for coarse web; in this case the ladder must be darned by passing the needle *through the loop*, and taking a bar and missing a bar alternately all down the ladder, being careful to darn a sufficient distance beyond the hole for strength. In 2nd row take up bars missed in 1st row, just as in the common method of darning.

III. Points for criticism are :--

(1) Loops badly picked up.

(2) Strands split.

(3) Grafting clumsy, and general appearance untidy.

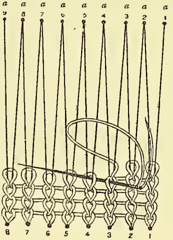
XLI. STOCKING-WEB DARNING.

I. Introduction.—Before this kind of darning is attempted it is necessary that Swiss darning and grafting should have been mastered—there is then little to learn, but a deal to practise.

II. Description of the darn.—It should resemble the surrounding fabric in appearance, and if the thread used to mend the hole is similar to the original material, the darn will be hardly noticeable as it is really hand-weaving a patch. It is necessary that the top, bottom, and sides of the hole be strengthened by Swiss darning, which is done as the work proceeds. As all "web material" consists of woven loops, the stitch for mending must imitate it exactly.

III. Method of working the stitch.—This is best taught by means of strands formed upon a card, and the loops worked around these strands (*not* through the card.) Plain and purl can be taught in this way, also intakes for the calf of a stocking. The latter should not be attempted until proficiency is attained with the plain and purl stitch.

IV. Description of card.—(Fig. 125) shows the usual method of preparing the card. It must be noticed that the dots in the lower



(Fig. 125.) Stocking web, plain stitched, as worked upon a card.

The bar of thread which is shown between each stitch would not be noticeable if the loops were closer together, as they would be in the web. They are spread out in diagram to show the working.

row are not *opposite* those of the upper row. These dots represent the *loops* of the web, and it will be remembered from the lesson on "Mending a Hole (common method)" that loop faces the space between loops, and *vice versâ*, therefore the dots are in the same relative position, so that the foundation strands stretch from upper to lower dots in the form of a V.

V. Directions for stranding.—Use crochet cotton, or thread a little finer and the same colour as that with which the darn is to be worked. If the strands are allowed to remain in the work when the darn is finished (this is optional) it is necessary that the latter should be used. On cotton webbing, Ermen and Roby's embroidery thread, No 35, is suitable for stranding, and No. 18 for working the stitch. Make a firm knot. Begin at the bottom right hand corner.

Bring needle out at No. 1.	Put in at No. 1*a*.
,, ,, ,, ,, 2*a*	,, ,, ,, 1
,, ,, ,, ,, 2	,, ,, ,, 2*a*
,, ,, ,, ,, 3*a*	,, ,, ,, 2
,, ,, ,, ,, 3	,, ,, ,, 3*a*
,, ,, ,, ,, 4*a*	,, ,, ,, 3

and so on, finishing at the bottom left hand corner.

If this stranding has been accurately done all the strands will be on the *upper* side of the card, and two threads in each dot, excepting at the *sides of the top*, which in webbing will correspond to half loops.

VI. The plain stitch.—The first row of loops on a *card* must be made rather *loosely*. Bring needle out at dot 1,* pass it under the two foundation strands, *not* through the card, from right to left, and put the needle in again at the same place as in starting; draw down, leaving a loop about $\frac{1}{6}$-inch; this forms the first stitch. Bring needle out at 2, and repeat from* to end of row, when each dot should have a loop above it.

2nd row.—Turn card completely round, so that what formed the top before is at the bottom now, the strands being *below* the working instead of above it, as in the 1st row, and the thread on the under side of the card; pass the needle *through* the card (but it must not pierce the card again throughout the work) and bring it out in the *middle* of the right hand loop, and *between* the strands; put the needle under the two foundation threads, and in again exactly in the middle of the first loop and between the strands, bringing it out in the middle of the second loop; pass under third and fourth strands; put needle into the middle of second loop and out in third loop; and so on to end of row.

To turn the corner.—Bring the needle perpendicularly through the middle of the last stitch. (Fig. 128) shows the end of cotton in the last stitch.

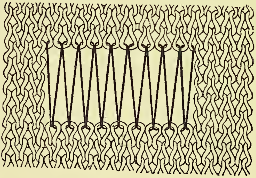
3rd row.—Turn card so that it is in same position as for 1st row. Work several rows until the stitch can be done regularly, so that it has the appearance of plain knitting.

VII. Preparation of material for mending.—It is advisable to use coarse webbing for practice.

Hold work right side uppermost.

Cut a perpendicular slit, and unravel *right and left* at the *top and bottom* of the hole (*not the sides*) until a perfectly *clear* row of loops is obtained sufficiently strong to bear the foundation strands. Do not cut the ravelling threads, but keep them on the wrong side till the darn is finished. The worn sides, which appear like shutters to a window, need not be unravelled, but must be turned back so as to present a straight edge, having *half a loop* on each side of the hole at the top, *e.g.*, suppose 9 loops are at bottom of hole, there should be 8 whole loops at the top and 2 half loops right and left.

This preparation must be well practised till the hole can be quickly arranged. Guard against making too large a hole at first, as it rapidly increases in size. A better grasp can be obtained over the work if the material needing repair be tacked *right* side uppermost upon a piece of card or paper. (Fig. 126) shows the hole prepared and stranded. Particularly notice the half loops at the top, which correspond to 1a and 9a in Fig. 125. The pieces of web which are turned under would not be seen on right side.



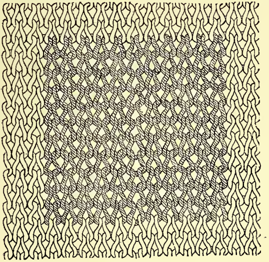
(Fig. 126.) Hole prepared and stranded.

VIII. Stranding hole.—This is worked exactly as on the card, only *into the loops*. Make a knot and pass needle through the card, and up through the 1st loop at bottom right hand corner (the loops should be taken on the needle as in grafting, *i.e.*, back to back); insert the needle at the top half loop (No. 1a on card), and bring out in next loop, then back to first loop at the bottom, and so on alternately top and bottom finishing at bottom left hand corner. There is a tendency to contract the hole in stranding, and so strain the loops. Be very careful to avoid this, or the appearance of the darn will be spoilt.

IX. Commencement of work.—It is necessary to strengthen the top, bottom, and sides of the hole by rows of Swiss darning. Bring the needle out a few rows below hole, and a few loops to the right (say four). Swiss darn across for the same distance on left hand side, and continue till the hole is reached.

X. Filling the hole.—Work the stitch exactly as described under head VI. The loops will require a little arranging with the needle as the work proceeds. Be careful to make the filling-in stitch match the original in point of size. Swiss darn the sides as each row is worked, *i.e.*, after the stitch is worked across the strands, with the same cotton darn over a few loops at the sides—turn the work round and darn the next row, and so on across the hole. When the hole is filled up, the last row is grafted to the loops which carry the foundation strands. Swiss darn above the hole to correspond with that below.

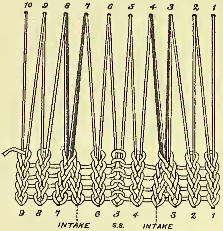
XI. Finishing off.—Cut the knot of foundation strand. Remove the work from the card. Darn the ends of the mending thread neatly on the wrong side. The sides which were turned back may be now cut off close, as the Swiss darning at the sides is sufficient strengthening. Many people prefer that the sides should be unravelled, each end threaded separately, and darned back in a slanting direction on to the wrong side of fabric. In this case it is not necessary to Swiss darn at the sides, but to work exactly as on the card, till there are as many rows of loops, minus one, as there are stitches at the sides, the last row is then joined by grafting. Thread each end and catch up the side loop of the mending, and darn down on the wrong side. If the end is short it is better to run the needle in, and thread afterwards. This is an exceedingly neat and flat method, but is more tedious to work on account of the threading process. A good darn can also be made by darning back each end, and Swiss darning only one stitch on each side of hole. It is optional whether the foundation strands be removed ; if taken out they should be *cut* and gently drawn, not pulled. Their removal adds to the elasticity of the darn, and makes the mending like the original web, so perhaps is preferable, but objections are often raised, because should the strands have been caught in forming the loops, the stitches will give way. (Fig. 127) shows a darn complete.



(Fig 127.) Plain darn in stocking web stitch.

XII. The purl stitch.—In order to put in a patch in the calf of a stocking, it is necessary to know how to work a purl stitch, and to form intakes. The purl stitch is best taught upon a card. Prepare as for the plain stitch. All that it is necessary to bear in mind is, that purling is worked exactly the *reverse way* to plain, *i.e.*, where the cotton passes *under* the strands in the plain stitch it is taken *over* in purl; complete the plain stitch which adjoins the purl (suppose the card to be held with the strands, *above* the work), put the needle into the middle of the loop *from the front*, pointing it to the N.E.—pass cotton over the strands, and bring it through the middle of the loop *from the back*, pointing it to the S.E., then proceed with the plain stitch. When the strands are below the working, the direction of the needle will be reversed, viz., S.E. and N.E. (Fig. 128) illustrates purl-stitch.

XIII. Intakes. — Here the method of stranding is slightly different, as allowance must be made for the additional loops previous to the decrease. The intakes are best taught upon a card. Suppose, for example, one set of intakes has to be worked. The lower row will have *two* more loops than usual; one plain stitch is kept each side of the seam loop, so, in stranding, the loops next this plain stitch must be passed over. The two odd loops can be stranded separately after the other foundation is formed. (See Diagram, Fig. 128.)



(Fig. 128.) Showing seam stitch and intakes.

When filling in the hole on stocking web material, the seam stitch presents a difficulty. The method of grafting a purl stitch is described in the lesson on "Grafting" (page 153). The seam loop must be *stranded* in *exactly* the same manner. It is not unusual to see an otherwise good darn spoilt by an incorrect grafting of the seam stitch.

To work the intake row: — Finish the fourth loop before the seam stitch, this will leave three clear loops, take up the second upon the needle, then bring the needle up through the third loop (by this means the third loop will be *above* the second); pass the needle round the four strands, and put it into the *middle* of the loops, still keeping the third on top of the second. This forms the intake *before* the seam stitch. To work the decrease *after* seam stitch, proceed as follows:—Complete the one plain on left hand side of seam; pass the needle through the second loop, and then through the third in the ordinary way. Make the third loop rest on the top of the second, put the needle under the four strands and insert it into the middle of the loops, be sure that the needle does actually pass *into the middle* of these two loops, otherwise when the stranding is withdrawn the loops will drop. The point of the needle will be an assistance in the arranging.

If two sets of intakes be needed, of course two loops on either side of seam stitch must be left when putting in the foundation strands.

The strands which bear the intakes can be cut out as soon as a few rows beyond the decreasings are worked, otherwise they are in the way for the ordinary working.

XIV. Uses of stocking-web darning.

For repairing any kind of coarse stocking-web fabric, such as jerseys, pants, knees of knitted stockings, or any part of an article which would look unsightly if the hole were darned by the common method.

N.B.—It is not intended to be used on fine web, as at the best of times it is a process requiring a large amount of care, practice, and skill, and an unlimited quantity of patience and perseverance.

XLII. PATCHING KNITTED OR WOVEN WEB.

I. Remarks.—Before attempting the above it is necessary to practise grafting and Swiss darning. This kind of patching is an excellent method of repairing coarse web. It does not take a long time to work, and has the advantage of making a worn garment wearable, but not unsightly with a quantity of darning. It is necessary to have a piece of material of the same texture and colour as the original, for unless the loops are of the same size the patch will not be flat.

II. Preparation of hole.—There are two or three methods of treating the sides of the hole.

1st Method.—Begin on the right side; do not cut away the worn part, but unravel till a row of loops can be obtained at the top and bottom of hole sufficiently strong to bear the new thread.

The loops must be clear and distinct, so that they could be picked up with a knitting needle if desired.

Be sure the sides are quite straight, *i.e.*, the column of loops on the right side, one above each other, with the *half* loop at the right and left hand corner of top row. Turn back the sides of hole and tack or pin down.

III. Preparation of piece for insertion.—This should be a few loops larger than the size of hole as it so quickly unravels. Have a clear row of loops top and bottom, and the sides cut evenly.

IV. To graft patch.—It is advisable to tack on a card or stiff paper, right side uppermost. Commence with bottom row of loops and graft these to the garment. It is better to leave all ends on wrong side and neaten when work is finished.

Unravel the upper part of patch to fit hole, remembering that grafting will *add* a row of loops.

Graft the upper part of patch to the garment. The sides should now be treated.

Turn under the sides of patch so that the web of garment and patch seem continuous (a few stitches in ordinary sewing cotton will keep this in place).

About 6 or 8 stitches of Swiss darning are necessary, 3 or 4 on the patch and the same on the garment. Fine thread is recommended for this, else bulkiness is inevitable.

Remove work from card; turn to wrong side and darn in all ends as for a plain darn.

The Swiss darning has rendered the sides sufficiently strong, so that the piece of web turned back can be cut off.

2nd method.—This is not quite so tedious as the last, but the sides are more unsightly.

The top and bottom of the patch are grafted in the same way as before. The sides of hole and patch should be cut quite evenly, and closely buttonholed with sewing cotton the same colour as the web, about two loops deep. It is well to run a few strands down the sides to prevent fraying. The knots of the buttonhole stitches are then sewn together on the wrong side.

3rd method.—Treat top and bottom of patch and hole as before, then unravel the sides quite straight, and leave the ends hanging of both patch and garment. Turn to wrong side, lightly overcast the edges to keep firm. Thread the needle with the end from garment, and darn it on to the patch in a slanting direction, then the end from patch, and darn on to garment, and so on alternately. If the end be short, it is best to darn the needle in, and thread afterwards.

This method makes a very flat patch, and is really "grafting" in every sense of the word; but has the effect of trying one's patience to the utmost.

The 1st method is the best for coarse material, the 2nd for fine.

The beauty of the patch lies in its perfect flatness when complete.

XLIII. FINE DRAWING FOR REPAIRING CLOTH.

I. Description. This is a method of darning applied to cloth, or thick materials not liable to fray.

Strictly it is a tailor's art, but as its application is often necessary, upon boys' clothing, and for other domestic purposes, a description of the system of working will perhaps be of service, considering that if successfully done the mend will be almost invisible.

II. Preparation for mending.—Sharp scissors are necessary. Cut the edges of the hole perfectly clean and even, either square or oblong, and a patch the exact shape of the hole. The patch should match the material surrounding the hole, both as regards selvedge and way of the nap.

Hold the garment wrong side uppermost, and lightly fix the patch in place with a few large stitches of cotton. Be very careful to keep all perfectly flat. Use fine silk, which should exactly match the shade of the material; the ravellings of the stuff are also suitable. A long, fine needle is recommended. Place one side of the patch along the forefinger of the left hand, so that the two edges are kept close together, while the thumb rests upon them.

III. Method of Mending.—Begin at the left hand side. Slip the needle between the thickness of the cloth, and bring out about $\frac{1}{8}$ inch from the edge of garment. Pass the needle, pointed *from* the worker, slightly in a slanting direction, to $\frac{1}{8}$ inch from edge of patch, only taking up *half* the thickness of the cloth, so that no stitch will be seen on right side, and only just the place of the insertion of the needle on the wrong; point needle *towards* worker and bring out again on garment; draw thread sufficiently tight, so that the edges neither overlap nor gape, but *just meet.* Continue working in this way, taking a stitch alternately on either side till the patch is inserted. Special care is necessary at the corners, to prevent any dragging or puckering.

IV. Finishing off.—When the mending is complete, remove any fixing threads, place a damp cloth upon wrong side, and press with a warm iron.

V. Remarks.—This is a very effectual method of repairing a tear in cloth, or inserting a patch, especially if there is not likely to be much strain upon the part. It is rather a tedious process, and requires some amount of skill in execution, but amply repays if well done.

A tear in cloth may often be mended in this way if the edges are not frayed much.

XLIV. THE REPAIRING OF HOUSE AND TABLE LINEN.

I. The Care.—The expression "household linen" is a comprehensive one, and admits of wide extension. It is not limited now, as was formerly the case, to table-linen, sheets, and pillow-cases, but is generally understood to include all articles in use for domestic purposes, whether made of linen or cotton.

A good housekeeper will always take a great interest in the repair and replenishing of the linen-press. In olden times the family linen had often as much store set by it as the family plate, and even in our day it is not unusual to hear the remark, "that belonged to my grandmother."

The worth of a housekeeper may often be estimated by the condition of the linen; not as regards the number of articles, but by the state of repair in which each is kept.

To mend successfully requires judgment and skill, which can only be acquired by practice.

Many people, who excel in the "making" of garments, have not the same reputation for "mending," because this branch of household management requires the display of that rarely-exercised quality—common sense—a faculty which is not always inborn. All articles for domestic use should be carefully stored in a linen cupboard, the shelves of which should be lined with clean paper. The cupboard must not be placed against an outer wall, in case of the penetration of damp; the most desirable position is near a wall which is in connection with the kitchen flue, as the warmth retained by the bricks is the best preventive from mildew.

A list of the articles should be hung up inside the cupboard, which will show the contents at a glance.

Certain times of the year should be chosen for the entire overhauling of the linen-press, so that the supply may be kept up annually with comparatively a small expense.

The weekly or fortnightly round of repairing must go on uninterruptedly year in year out, as by this means a housekeeper may save many shillings by extending the time an article will wear. When linen is returned from the wash it should be overlooked for places needing repair, and hours of mending may be ultimately saved if rents and cuts are lightly drawn together before washing, in order to prevent them "going further," which invariably happens after washing and wringing. Table linen should always be mended previous to washing.

In a well-arranged linen cupboard, each set of articles should have a selected place. When linen is returned from the wash, after having been aired and mended, if necessary, each article should be placed at the bottom of the pile. This arrangement will secure uniformity in the wear.

Old house linen should always be preserved, the finer kinds for bandages and wounds, and the coarser for kitchen and house rubbers. Old muslins are suitable for poultices and for straining purposes. Worn calico articles are useful as wrappers and dust covers. Old blankets and quilts, too thin for bedroom service, may be turned to a variety of uses in the house.

II. The Repair.—

Sheets generally begin to wear in the middle, and directly a weakness is noticeable they should be turned sides to middle. This is effected by cutting the sheet down the centre, sewing the selvedges together to form a new middle, and hemming the outer raw edges. By this means the time of wear may be considerably lengthened. Ends also are sometimes turned to middle. Thin places can be darned neatly with flax thread, or patching may be adopted at any stage of wear.

Bolster cases are often made from worn sheeting; also coverings for pillow slips, used merely for keeping the tick clean.

Tablecloths.—Flourishing thread should always be used for mending purposes. (See page 134.)

Four kinds of repairing may be noticed:—

1st. A clean cut made by the careless use of a knife. The method of mending is described under the head of a "Cross-cut."

2nd. A thin place caused by wear. This should be darned, as described in the chapter bearing upon this kind of work.

3rd. A tear or hole.—A very successful plan of mending a worn tablecloth, and a more careful and neat way than treating as for a calico patch, is as follows:—

Procure a good piece of cloth, matching the original as nearly as possible in texture and pattern. Cut this ¾-inch larger than the size the patch is required. Place this right side downwards upon the wrong side of the worn cloth, paying attention to the way of material, and the matching of pattern as near as is possible. Fix carefully close to the raw edge taking care that the patch is perfectly flat. Commence at the left-hand corner and darn down the edge of patch on to the edge of cloth, exactly as for strengthening a thin place. A good ¼-inch of darning on both patch and cloth is generally sufficient. Leave short loops, about ⅛-inch, to allow for shrinkage in washing. Darn all round the four sides of the patch similarly. With a penknife or blade of the scissors, gently raise up any loose edges of the patch, cut these close, and smooth the darning with the round blade of the scissors, or the bowl of a spoon. Turn to right side and cut away the damaged material, leaving ⅜-inch margin. Darn down the raw edges and trim as on other side.

This is rather a slow process, but well repays for the trouble.

4th. Filling in a hole to pattern.—This method of mending is described under "Damask Darning."

When damask is beyond use as tablecloths, the best portions may be turned to account for tray-cloths, finger-napkins, small cloths to put under pie-dishes, fish napkins and numerous other purposes which will suggest themselves to a housekeeper, as old table linen is useful to the last rag.

Towels may be treated similarly to table linen.

Quilts and toilet covers are generally darned with white darning cotton.

Muslin curtains.—These should be mended when "rough dry," but holes are best treated if lightly drawn together previous to washing.

A person who can mend thoroughly well is sure to be a good housekeeper in other respects. Nothing shows painstaking industry more than good darning, as though necessary work it is sometimes perhaps, rather monotonous, but a "Stitch in time saves nine" is a homely proverb, and one's conscience has often to repay for care and trouble bestowed, besides, there is always a sense of satisfaction in having done a "duty."

XLV. DAMASK DARNING.

I. Introduction.—This chapter will probably be perused only by a few, who, out of curiosity or necessity, feel inclined to penetrate into the mysteries of darning table-linen to pattern.

We start equipped with a large amount of unlimited patience, determined perseverance, unflagging interest, and sundry other virtues which may best be interpreted, also strong eyesight and skilful fingers.

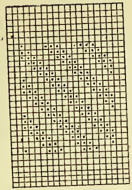
To those familiar with the principles of Kindergarten, damask darning will present but little difficulty, as the occupation of "mat-weaving" will have already formed an excellent introduction to the method of darning adopted when restoring the pattern of a woven design.

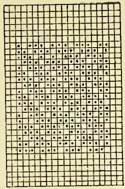
Much attention is given to this mode of darning in Continental schools, where pupils are taught an endless variety of damask patterns upon canvas. The utility of all this may be questioned, but it has the advantage of developing the powers of observation and invention, and teaches accuracy, which is such an important feature in any sphere of life.

II. Preparatory work.—All woven materials consist of two sets of threads, viz., warp and weft.

The former are longitudinal threads, and run throughout the entire length of the fabric, and in the act of weaving were stretched tightly in the loom. The weft threads are those which cross the warp at right angles, and if a piece of canvas, calico, or linen be closely examined, the weft thread will be seen to take up and pass over alternately one of the warp threads. If it be necessary to mend a hole in linen otherwise than by patching, this plan of forming the lattice work must be adopted.

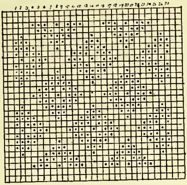
If any piece of damask (preferably coarse) be looked at carefully, it will be noticed that the pattern is formed merely by taking up a few of the warp threads, and missing a few alternately, varying in number according to the design. The simplest pattern is a twill, two varieties of which are shown in (Figs. 129 and 130). Examining closely will show that the pattern repeats itself every few rows. Whatever pattern has to be imitated, it is advisable to draw out a plan to work by, similar to the illustration (Fig. 131), which is an analysis of a diapered design, the successive dots representing the number of threads *taken up*, while the blank





(Fig. 129.) Twilled designs. (Fig. 130.)

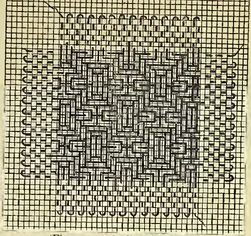
spaces show the number *passed over*. It is advisable that the pattern be practised upon canvas. Java canvas and embroidery cotton in two colours are recommended for beginners.



(Fig. 131.) A diapered design.

To form the web.—The mode of working on canvas is described here, which can then easily be applied to the damask. Cut away the worn and damaged material (a hole must be made in the canvas) quite even at the sides, and the top and bottom; the shape will depend upon the size of the hole. The darn is worked upon the wrong side.

A piece of paper placed under the hole upon the right side helps to keep the material firm, and so prevents dragging. This is optional, and some can work more successfully without the backing. Hold the material in working so that the selvedge runs from top to bottom. About half inch of darning is usually necessary on the material surrounding the hole, which, besides strengthening, forms a firm hold for the foundation strands. Begin at the top left-hand corner, take up and pass over threads till the hole is reached, continue the same strengthening at the bottom, when a foundation or warp thread will be formed across the hole; work thus, backwards and forwards till the same number of threads are put in as were cut away. Be careful to avoid pulling the strands tightly, or a puckered appearance will be the result. When the warp is complete the work should be turned round, so that the warp threads run from right to left. With cotton of another colour, the "pattern" is now formed across the warp. The illustration (Fig. 132) is analysed in the design 131. It is worked as follows:—Begin at top left hand corner, darn the strengthening piece, and when reaching the strands—



(Fig. 132.) A diapered design.

1st row.—Miss three, take three, miss one, take three, miss five, take three, miss one, take three, miss three, and darn at the bottom.

2nd row.—Miss two, take three, miss one. take one, miss one, take three, miss three, take three, miss one, take one, miss one, take three, miss two, and darn at the top.

3rd row.—As the 1st.

4th row.—Take one, miss three, take five, miss three, take one, miss three, take five, miss three, take one and so on. It is unnecessary to detail the other rows, as by this time the student will see the method of forming the designs. With a little practice the eye quickly detects the position of the threads, and, as it were, anticipates the pattern.

III. Darning on Damask.—Linen or flax thread is used for mending; it can be bought in several sizes in white, suited to the threads of the damask. (See advertisement page 225). The hole should be prepared as described above for canvas work, and the same method of mending applied. Very small loops should be left at the ends of the rows, they may be afterwards cut if preferred. The darn can also be worked in the reverse order, by putting in the weft threads as a foundation, and forming the pattern by the warp. The pattern is sometimes commenced from the *middle* of the hole, and worked right and left, of course, this is optional, and may be done at the discretion of the worker.

XLVI. METHODS OF ARRANGING OPENINGS IN GARMENTS.

I. Introduction.—There are many ways of arranging openings in garments by the addition of false hems or false pieces.

It is proposed in this chapter to describe a few of the common methods of arranging an opening in a garment, making it neat throughout its length and strong at the lower part.

The principal point to be kept in mind when cutting the placket or opening, is to so arrange the sides that the opening may come *in the middle* of the garment (if it is intended to be there) when completed.

Different garments require different methods of preparation, according to the position of the placket or opening.

II. Length of openings.—These may vary with different parts of the garments, but the following can be taken as the approximate length.

Front of chemise for a woman.—4½ to 5½ inches, or about ⅛ of the length of garment.

Front of nightgown and shirt.—The length of the collar.

Wrist opening in shirt.—½ length of wristband, or ⅓ length of the seam of the sleeve.

Side opening in shirt.—Length of armhole measured from the front width.

Back of baby's nightgown.—About 5 inches below waist.

Side of children's drawers.—⅓ length of garment before any shaping is done.

Placket of petticoat, skirt, or frock.—About ⅓ of length.

III. Method of arranging openings.

(1.) The simplest way, which would be suitable for the back of a baby's or child's nightgown, the skirts of a child's frock, petticoat, or all round pinafore, is to tear the opening *exactly* in the middle of the garment. Make a small snip, ⅙ inch, at right angles to the slit, which will facilitate the turning of the hems, and so make the lower part of the opening set flatly. (Nearly every method needs this latter preparation, if the opening is to set well.) Make a narrow fold, ⅙ inch for the first turn, on each side of the opening, and the second turn the required depth, which will depend upon the garment in making—about ⅜ or ½ inch would be suitable for a nightgown, frock, or petticoat, and ½ to ¾ inch for a pinafore, especially if a buttonhole be needed as a fastening. These hems should each be the same depth throughout their length, which will cause a pleated appearance at the lower part of the opening, but this will disappear if the hem which is to form the under side, be snipped across for about half its width on the wrong side at right angles to the opening. The upper hem should then be wrapped over the under for the width of the hem, and stitched across on the right side for strength.

The raw edges on the wrong side may be neatened in either of the following ways :—(1) Buttonholing the edges, which is recommended for thin materials, or (2) Felling a piece of tape or material at right angles to the opening. The arrangement of the opening in this way must bring it exactly in the centre.

(II.) A method very similar in working to the above, would be to arrange for a narrow hem on the under side, and a wider one for the upper. In this case the slit must *not* be made exactly in the middle, or the opening will be one-sided.

To mark the position of the slit.—Hold the garment in place just *as it would be if it were upon a wearer*, mark the exact half with a pin, placed perpendicularly; note which way the garment is to fasten—left over right, or right over left—for the sake of example, say the latter, and make a snip rather more than ¼ the width of upper hem (the piece more than the ¼ is for turning) towards the left hand side of pin. Make the snips at the bottom of opening as directed in Method I., and turn the hems, only in this instance the under hem is allowed to be *half the width* of the *upper*. Wrap over so that the under hem lies exactly in the middle of the upper hem. Stitch across and neaten wrong side as in Method I.

If the material be folded in half from the *middle* of the upper hem, this point will mark the exact centre.

(III.) To arrange for a wider hem on the upper side (say, the right) and a false hem on the under.—Hold the garment in position as it would be upon wearer. Mark the half with a pin. Make the opening to the left of pin, *half the width of the upper hem*, plus about ⅙-inch for turning. Make the upper hem the required width, keeping it straight throughout its length. Take a strip of calico ¾-inch wide, and about ½-inch longer than the length of opening, and lay it to the edge of the left hand, or under side, right side of strip to be placed to the right side of garment, and run it close to the edge. Turn the strip to the wrong side, so that no part of it is seen on the right side, and fell in place. The lower part of this false hem may be turned in and hemmed, or left raw-edged and neatened with tape.

(IV.) The following method can be adopted when both an *upper* and an *under* false hem are put on, and is suitable for the front of a garment, which is not sufficiently wide to allow the hems to be taken from the width. This method would be used on chemises or nightgowns, and is convenient when trimming is put around *both* sides of the upper false piece.

Mark the middle of the garment with a pin. (Suppose the fastening to be right over left.) The method described with the drawn threads, is for a stitched false piece. Feather-stitching may be preferred, in this case the drawn threads are unnecessary.

Place the work *against the body as it would be if it were a garment to be worn*, and cut or tear a slit for the front opening, the required length, and a $\frac{1}{4}$ *inch to the right of the middle*. The upper false piece should measure $\frac{3}{4}$ in. longer than the opening, and be $2\frac{1}{2}$ ins. in width. Place the right side of strip to the right side of garment, and run the edges together. (The extra $\frac{3}{4}$ inch of false piece must be at the bottom of the slit.) Draw two threads on the strip—the first, $\frac{5}{8}$ inch from the raw edges of the opening; the second, $\frac{3}{4}$ inch from the first one. Fold over the false piece so that the first drawn thread comes about $\frac{1}{6}$ inch from the fold—fix in place. Turn under the remaining calico so that the position of the second thread corresponds with the first—fix in place. Fold the calico at the bottom of the opening, so that the false piece ends in a point (this is optional, but if left straight, the strip need not be quite so long). Turn down the raw edges of the false piece so that the fold is even with the running stitches, cut away any superfluous calico at the bottom of the opening in order to make the work flat. Fell into place, being very careful that the stitches do not show through on right side. Stitch the front in the drawn threads. The false hem for the under part of the opening is put on as described in Method III.

The stitches which secure the false piece should come to the *right of the middle* of the false piece, as the button-holes may be needed in the centre, and flat material is necessary upon which to work these. Wrap the upper hem over the under, and stitch across to make firm, and better still, *sew* the under part of the upper piece to the garment; do not let the stitches show through on the right side. (This makes the lower part of the opening very strong, and it should often be adopted.) Neaten the wrong side as described above.

This method is also suitable for boys' day shirts and men's nightshirts. For these garments the slit would be made $\frac{1}{4}$ inch to the *left*, as they always fasten *left over right*, and the wide false piece put on the left side.

(v.) A method recommended for boys' and men's nightshirts, when material is full enough to allow the hems being made *without* the addition of false pieces, is arranged as follows:—Mark the half of front with pin. Hold garment against worker just as it would be if on the wearer. (The shirt is to fasten left over right.) Make the opening $\frac{3}{4}$ of an inch to the right of the pin. This will allow for the stitched front to be $1\frac{1}{4}$ inches wide; if less than this be needed the opening should not be made so much to the right. Make snips at bottom of the opening at right angles to the slit. Fold under the one inch on to the wrong side, and put in two rows of tacking, one at the raw edges on the wrong side, and the other at the fold on the right side. Stitch on right side, $\frac{1}{6}$ inch from fold (a thread may be drawn if preferred, but on stout calico or twill it is not of much use.) At a distance of $1\frac{1}{4}$ inches from the folded edges, and on the right side of material, tack up a pleat of stuff by letting the wrong sides touch. Put a line of stitching $\frac{1}{6}$ inch from the edge to secure this fold, and to match the first row. Fell down the fold which will be formed by the stitching, on the wrong side, so as just to cover all the raw edges. These felling stitches must not show through on the right side. The under hem on the right-hand side of garment should be about half-an-inch (not less) in width. It must be cut across on the wrong side to make it set flatly. Wrap the left hand piece across so that it lies exactly over the middle of the under piece, stitch and sew firmly in place, and make raw edges neat as before mentioned.

(VI.) Another method of arranging for shirt openings is as follows:—Make the slit exactly in the centre, and cut across the lower part of opening at right angles, for 2 inches on each side. Turn back the left-hand side for 1¼ inches (allowing ¼ inch for turnings.) Tack it firmly in place and put two rows of stitching, about ⅙ inch from the edges. Turn under the right-hand side with a 1¼ inch hem. Wrap over the upper piece and stitch it across. Make a box pleat with the calico which was cut at the bottom of the opening, and attach the raw edges lightly to the upper hem with a few stitches, so that the work will set flatly. Stitch a narrow band on the right side over these raw edges, and fell a piece of material or tape on wrong side.

(VII.) **Method of arranging the side opening in children's drawers:—**

(1.) Tear the slit exactly at the side. Make two narrow hems ending in a point. Take a piece of tape about about 2½ inches long and ⅜ inch wide, and fell round the lower part of opening, crossing it at the bottom in the shape of a V, to make it set well. It must be sewn to the folded edge, and is strengthened by buttonholing at the corner. (See page 175.)

(2.) Prepare with the hems as above, and insert a gusset as described in Chapter IV.

(3.) Make a wide hem on the back part of the drawers, and a narrow hem on the front part, and finish as mentioned in Method I. This plan makes a pleat in the leg.

(4.) A false hem may be put on both front and back, somewhat as described in Method IV.

(VIII.) **Wrist opening.**—The preparation of this is given in the chapter on Gussets. Another plan of arranging without a gusset is as follows:—Take a piece of material, selvedge way ½ inch longer than the opening, and nearly 3 inches wide. Snip the bottom of the opening to make it flat when false piece is put on. Run this strip on to the under part of sleeve, and turn it over, and fell it on the running stitches. Turn in the raw edges at the bottom of the strip, and stitch the false piece firmly in place on to the sleeve. The other side of opening may have a narrow hem.

IV.—Note.—It is suggested that each method should be tested, on a small specimen before its application to a garment.

XLVII. (a) A STRENGTHENING TAPE.
(b) A LOOP FOR A TOWEL.

(a) A STRENGTHENING TAPE.

Note.—Standard V., Group D., 2nd part, reads as follows:—"Show on material how the armhole of a baby's shirt can be strengthened with a piece of tape."

I.—Reason for Use.—A strengthening tape is placed on garments at the end of an opening or a seam, in order to give a neat finish, and to prevent the slit from tearing down in wearing—hence in many garments it is a substitute for a gusset. Tapes can be used at—

(1) The under-arm of any pinafore, when the armhole is merely a slit, as in a cottage shape.

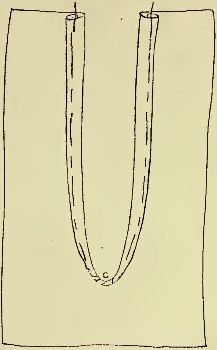
(2) The side opening of children's drawers.

(3) The lower part of placket holes in petticoats or other garments.

(4) The end of a seam in a shirt sleeve, or the side seam—this is especially suitable for flannel, as a gusset would be clumsy.

(5) The under-arm of a baby's first shirt, which seems the least likely place to apply a tape practically, as a baby's shirt usually has either a gusset made of a single piece of stuff, or an inserted sleeve, and shirts are made of such fine material, that taping the armslit would, perhaps, be considered by many a harsh way of neatening. The method, however, of preparing the slit and the tape requires much care. The cutting out of a baby's shirt is a simple garment and within the limits of Standard V., therefore this test affords a favourable opportunity of teaching all the details connected with a strengthening tape, so that it may be applied upon whatever garment is thought necessary.

II. Directions for working.—The slit in the piece of material representing the garment should always be made the selvedge way of the stuff—that is, with the selvedge threads running from the top to the bottom of the garment. This would be so in every article of clothing, if cut out properly. Narrow hems, about one-sixth inch, are needed on either side of the opening. These hems require the utmost care in fixing, as they should taper off to the extreme point, consequently the hems must be well flattened with the left thumb-nail, in order to stretch the calico to ensure its flatness. The slightest bit of pucker depreciates the whole thing. Fig. 133 shows the hems fixed, and the few loose sewing stitches just at the point of the tear, which are useful in securing the raw edges. It is not really necessary to hem these folds until the tape is put on, and then the material left over after the tape is arranged can be hemmed. This is optional.

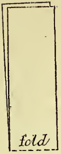


(Fig. 133.) Showing hems tacked.

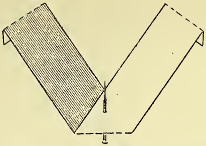
To prepare the tape.—A piece of tape about 3 inches in length, and about ⅜ inch in width is suitable for most garments. For a baby's shirt it may be a little narrower if wished. In order to make the tape *set well*, it is necessary to "cross or twist it," and in consequence it is sometimes called a "shaped" tape, to distinguish it from the *straight* piece of tape which is frequently felled over the raw edges on the wrong side of openings in garments, when arranged with one hem stitched across another hem.

To arrange the tape.—

(1) Fold the tape in half as shown in Fig. 134, and make a crease across its width.
(2) Slip the point of a pin in the half of this crease, and fold over the upper piece of tape towards the right-hand side so that it crosses the under piece, and fix the pin as in the diagram (Fig. 135)



(Fig. 134.)



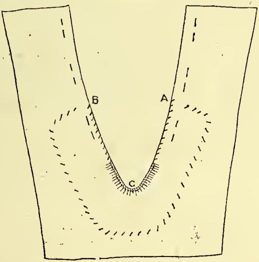
(Fig. 135.)

Preparation of tape.

(3) Turn under the narrow raw edges of tape once (see Fig. 135), and the little projecting corners may be cut off, or they will tuck under nicely with the needle.

(4) Place the point of the V of tape to the point of the hem (C in diagram 136), and the pin already in use will serve to keep the tape fixed. The tape should be placed on to the wrong side.

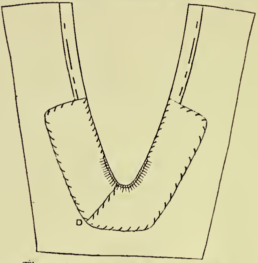
(5) If preferred the edge of the tape *may be tacked* to the folded edge of hem, but so small a piece of work easily admits of working without tacking. Turn the material representing the garment to the right side, and hold it so that the slit opening is towards the *right* hand. Hold the near side of the garment and tape between the thumb and



(Fig. 136.) Tape complete on Right Side.

finger. Begin to sew at A in Fig. 136, and work all round to B, putting close stitches at C. Do not break the cotton. Stroke the sewing to make the work quite flat.

(6) Turn the work to the wrong side, and the cotton will be in readiness to fell down the edge of tape on the wrong side. It is, perhaps, better to tack this, but is optional. The fold of crossed tape at the bottom will need stretching to make the tape set perfectly flat on the calico. Fell round as far as D, Fig. 137, making the stitches show through



(Fig. 137.) Tape complete on Wrong Side.

regularly. The little piece of cross tape at D must be felled (it is better not to let the stitches show on the right side), and when finished the needle can be slipped between the tape and the calico, and the felling resumed. The finishing off should be neat and strong, and the end slipped between. Flatten the felling well.

(7) The bottom of the slit and the edge of the tape may be buttonholed. Hold the right side towards the worker. Slip the needle between the folds, and bring out at the edge nearly half an inch to the left of C. Work the stitch rather close and tightly, about $\frac{1}{8}$-inch deep, and extend the working to the same distance from C on the right hand side. Fasten off similarly to commencement. This buttonholing is not absolutely necessary, but lends a neat finish.

III.—**Remarks.**—A large piece of very coarse linen and tape (about an inch in width), with coloured thread, provide the best means of illustrating this lesson to a class, or paper of contrasting colours may be used, the paper being broken in order to flatten it.

(b) A LOOP FOR A TOWEL.

I. Introduction.—This test is one of the recent additions to the Code requirements for Standard V., and should be welcomed by teachers, as it is one of the most practical pieces of needlework required from children. It is small, therefore does not become wearying to a child, needs a certain amount of skill in order to be well done, and, what seems more important, is work that a girl will be able to carry out easily in her home life to a most useful purpose.

The teacher should provide herself with a towel having an attached loop, in order to illustrate its position and use. The loop may be secured either to the middle of one end or to the corner, perhaps the former is better as a class test.

Each child should be provided with a small piece of calico, about 4 in. by 3 in. (*i.e.*, 4 inches selvedge way by 3 inches weft way), to represent the towel, and a piece of tape 6 inches long and about half an inch wide.

II. Directions for working.—

(1) Fix a hem across the *weft* way of the piece of calico illustrating the towel. Make one-sixth inch turn for the first fold, and half an inch for the second. This need only be tacked, but the diagram shows the hem complete.

(2) Mark the half of this miniature towel by creasing it in half selvedge way, as it would be folded to hang on a towel horse.

(3) Double the tape to mark the half as shown in the diagram, and sew the selvedges of the tape together for *nearly an inch* (more than $\frac{3}{4}$ inch), beginning at the raw edges. Fasten off the sewing very securely, and flatten out the work with the thumb.

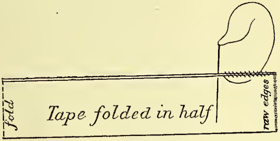


Fig. 138.

(4) Turn under the raw edges of the tape for $\frac{1}{6}$ inch. The sewing should be on the outside.

(5) Place the line of sewing to the crease which marks the half of the towel, so that the *end* of the sewing comes *just to the edge of the towel* (see Fig. 139). Pin or tack in position.

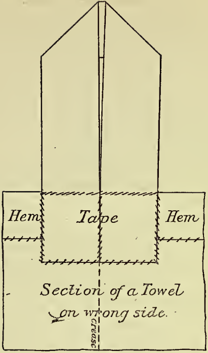
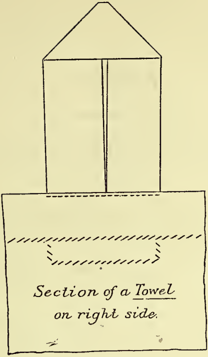


Fig. 139.)

(6) Fell round the three sides of the tape, beginning at the right-hand side, and keeping the corners quite to a right angle—when felling over the thicknesses of the hem, *every* stitch should be taken well through, or else not any (the diagram illustrates the latter). Do not break the cotton.

(7) Turn the work to the right side, and with the same cotton stitch or sew (the former is preferable) the extreme edge of the fold of the hem to the tape. Finish by slipping the needle between the thicknesses of the material. (See finished diagram, Fig. 140.)

Note.—If preferred the tape may be sewn to the edge first and the felling worked afterwards.



(Fig. 140.)

APPENDIX I.

INSTRUCTIONS TO H.M. INSPECTORS AS TO EXAMINATION IN NEEDLEWORK.

(Schedule III.)

1. Forty-five minutes (exclusive of the time occupied in giving out and collecting the work) should, as a rule, be given to this examination. The time given to the examination in needlework should be continuous and uninterrupted.

2. A table of exercises, to be worked in this time, is annexed. The material required for each is shewn. The exercises, if completed so far as to furnish a proper test, will satisfy the requirements of the examination.

3. It is desirable that as a rule, and when the numbers in the standards are sufficiently large, the whole of the exercises should be given. You should therefore divide the scholars in each standard examined into as many groups (A, B, C, &c.) as there are exercises to be performed, and assign one exercise to the children of each group. Thus, for example, Standard IV. would be divided into four groups, and each of the four exercises would be worked in one of the groups.

4. Suitable needles, cotton, thimbles, scissors and inch-tapes, if not given out beforehand, should be in readiness for distribution with the other materials, so that time may not be lost at the examination. Each girl should fasten securely together the different specimens, if the exercise include more than one.

5. It is important that too fine needlework should be avoided. No exact rule as to the size or number of stitches (on a given space) can be laid down; but the approximate Standard to be kept in view, in hemming, seaming, and stitching, may be taken to be as follows:—

Hemming.	Infants and Standard I., about 6 to 10 stitches to the inch. Standard II. and upwards, about 8 to 18 stitches to the inch.
Seaming and Stitching.	Standards I. to VI., about 12 to 18 stitches to the inch.

(According to material.)

6. It is essential, however, that children should be taught needlework according to this approximate Standard without counting threads (a habit which is most pernicious to the eyesight), and that their knowledge of it should be attained simply by training the hand to work with the eye.

7. You should take care that children of weak eyesight are given an exercise which will not be injurious to their eyes, and in serious cases they should be excused altogether.

8. If the specimens are taken away for examination, it is desirable that at the close of the time allotted, each child's work should be folded separately, the exercises in each group tied together, and the whole made up in standards, and fastened up, with the name of the school outside.

9. Coloured cottons are recommended throughout. The object of giving two colours is to test the children's knowledge of "joinings"; this must be attended to in all cases.

10. Great attention should be paid to evidence of carefulness in teaching "joinings" and "fastenings" on and off, and to general neatness of finish.

11. In cutting out, more credit should be given to correct proportions and useful intelligent work than to elaborate or trimmed paper models. This applies more particularly to the cutting out that may be shewn as part of the work of the year.

12. It is of great importance that teachers of all grades should give evidence of their power of teaching needlework by demonstration and by simultaneous method; you should, therefore, whenever practicable, call upon one or more of the pupil-teachers and assistant teachers in each school, and especially the certificated assistants, to give an oral lesson in your presence.

13. In order to give more practical illustration to the lessons in mending, it is desirable that the teachers should allow a certain number of children above Standard IV. to bring to school garments needing repairs, and should superintend the mending of them.

14. In future the exercise in hemming and the needle, position, and knitting-pin drills will not be compulsory for children in or below the lower division of infants.

15. The needlework of half-time scholars should in all cases be leniently judged, both as regards quantity and quality.

SCHEDULE III.

NEEDLEWORK.

See also Appendix I. of Revised Instructions.

N.B.—The materials and the stitches of the exercises performed before the Inspector, or in the garments shewn to him, should not be so fine as to strain the eyesight of the children, and the presentation of needlework of too fine a character will be considered a defect.

GIRLS' AND INFANTS' DEPARTMENTS.

BELOW STANDARD I.

1. Needle drill. Position drill.

2. Strips (18 inches by 2 inches) in simple hemming with coloured cotton, in the following order, viz.:—1. Black. 2. Red. 3. Blue.

3. Knitting-pin drill.

4. A strip knitted (12 inches by 3 inches) in cotton or wool, or four small squares (3 inches by 3 inches).

STANDARD I.

1. Hemming, seaming (top-sewing), felling. A small untrimmed garment or other useful article, shewing these stitches.

2. Knitting. 2 needles, plain, *e.g.*, a strip or a comforter.

STANDARD II.

1. The work of the previous Standard with greater skill. A small untrimmed garment or other useful article.

2. Knitting. 2 needles, plain and purled, *e.g.*, cuffs, or any simple knitted article, vests, strips for petticoats, &c.

STANDARD III.

1. The work of the previous Standard, stitching on coarse material, pleating, and sewing on strings. A simple untrimmed garment, *e.g.*, a pinafore, an apron, a petticoat.

2. Herring-bone stitch on single thread canvas, or on cheese cloth.

3. Darning (simple) on single thread canvas, or on cheese cloth.

4. Knitting. 4 needles, plain and purled, *e.g.*, cuffs, welts of socks, &c.

STANDARD IV.

1. The work of the previous Standards, and gathering, and setting-in. An untrimmed garment, *e.g.*, a chemise, child's overall, &c.

2. Darning, plain (as for thin places), on stocking-web material.

3. Knitting. 4 needles, a simple knitted garment.

4. Patching on coarse flannel (herring-bone stitch).

5. Cutting out, in paper, a child's chemise or plain pinafore (two sizes), to be cut out by some simple scale of proportion.

STANDARD V.

1. The work of the previous Standards. Buttonholing and sewing on buttons. Putting on tape loops and strengthening tapes. A simple garment to be cut out by the maker.

2. Knitting. 4 needles, a simple knitted garment.

3. Plain darning of a hole in stocking-web material.

4. Cutting out, in paper and in material, a garment suitable for making up in Standard III.

STANDARD VI.

1. The work of previous Standards and tuck running. Any garment (shewing the stitches of this and previous Standards) to be cut out by the maker.

2. Patching in calico and print.

3. Cutting out, in paper and in material, a garment suitable for making up in Standard IV.

STANDARD VII.

1. The work of previous Standards and gusset making. Garment cut out by the maker.

2. Darning on coarse linen (diagonal cut), and on woollen material (hedge tear).

3. Cutting out, in paper, a reduced and an enlarged pattern of the garment selected for the year's work (paragraph 1).

NOTES.

In schools where needlework is taken under Art. 101 (*c*) the following requirements of Schedule III. shall be omitted :—

Standard IV. (5), "Cutting out in paper, &c., &c."
Standard V. (1), "to be cut out by the maker."
Standard V. (4), "and in material."
Standard VI. (3), "and in material."
Standard VII. (3), "Cutting out in paper, &c., &c."

SCHEME FOR SMALL SCHOOLS.

	1st Stage.	2nd Stage.
NEEDLEWORK -	Hemming, seaming (top-sewing), felling, and pleating. Garments showing these stitches. Knitting with two needles. A small garment for every two scholars, or a reasonable number of needlework exercises, and a knitted article, suited to this Stage, to be submitted to the Inspector.	Gathering and button-holing. Darning on stockings or woollen material and patching in calico, print, and flannel. Knitting with 4 needles. Garments suited to this Stage, and a sock, stocking, or simple knitted garment to be submitted to the Inspector. Elementary cutting-out in the highest class only.

NOTES.

1. Garments must be shown in each Standard, but not necessarily those specified in this Schedule, which are mentioned merely as examples. They must be presented in the same condition as when completed by the scholars.

2. At least half as many garments as there are children in average attendance in Standards I., II., and III. should be shewn, one-third of these may be knitted articles. Each garment must be entirely made by its own Standard. In Standard IV. and upwards each girl must (if she has attended school six months or upwards) present a small and simple garment made by herself, or she may present a half garment if an adequate sample of the stitches used in the garment be shown, or she may present a larger garment tacked together and partly worked in each detail. The garments or half garments must in Standards V., VI., and VII. be cut out by the makers.

3. The garments made by children in the lower Standards should (as a rule) be cut out by girls in Standards V., VI., VII In Standards IV. and upwards, the children must fix their own work; in the three lower standards they should be taught to fold and tack hems and seams, but they will not be required to fix the work in the garments made by them. Those above Standard I. (or, in small schools those above Stage 1) will be required to "fix" and "cast on" in the exercises performed before the Inspector.

4. Girls attending Cookery classes during any of the hours devoted to Needlework shall be allowed to present to H. M. Inspector simpler garments than those required in their respective Standards, or garments (according to their Standards) tacked together and partly worked in each detail.

Girls who have passed the Standards fixed by the bye-laws for half-time exemption from attendance at school and are beneficially employed, shall be exempt from presenting a garment to H.M. Inspector.

5. Alternative schemes of needlework, suited to the special requirements of a district, may be submitted to the Department by the managers of a school.

PUPIL TEACHERS (GIRLS).

First Year.

1. A small nightgown or a man's nightshirt.
2. A hole mended (common method) in stocking-web material.
3. Paper patterns (cut out and tacked together) of the garments named in paragraph 1; measurements to be stated.

Second Year.

1. A girl's overall or a woman's cooking apron.
2. A patch in calico, one in print, and one in flannel.
3. A reduced and an enlarged pattern, in paper or material, of the garment selected for the year's work. The pattern to be cut out and tacked together; measurements to be stated.

Third Year.

1. A gored flannel petticoat or an infant's long flannel.

2. A three-cornered (or hedge-tear) darn on woollen material, and a cross cut (or diagonal) darn, on coarse linen.

3. Paper patterns (cut out and tacked together) of the garments named in paragraph 1.

4. A knitted sampler shewing the intakes at the back of a stocking, the turning of a heel, and the decreasings and finishing off of a toe, or a complete stocking.

Fourth Year.

Preparatory to the Queen's Scholarship Examination.

1. A sampler in calico, shewing all the stitches required in the making and mending of calico garments.

2. A sampler in flannel, shewing all the stitches required in the making and mending of flannel garments.

3. Paper patterns, cut out by proportion or by measurements, of a chemise, a pair of drawers, and a petticoat (girl's) ; the patterns to be made up by tacking.

NOTES.

1. In all cases the specimens, garments, and drawings shewn to the Inspector must be done without assistance, and presented as they left the worker's hands. All garments must have been cut out by the makers.

2. The garments should be of plain simple patterns, shewing intelligence and good workmanship, but without elaborate detail.

3. Whenever a child's garment or the pattern of a child's garment is made, the age of the child for whom the garment is intended should be stated.

4. Only one of the two garments mentioned in paragraph 1 (first, second, and third year) is to be made up by the pupil-teacher, but the measurements and manner of making up the other garment must be learnt by her.

In the following Table the requirements of the Code for each Standard are divided into groups of lessons of moderate length, any one of which may be given by the Inspector in their respective Standards.

Infants, Lower Division (Optional).	Infants, Upper Division.	Standard I.	Standard II.	Standard III.
A.—To hem 3 inches in one colour.	A.—To hem 5 inches in one colour. B.—To knit 6 rows of 12 loops previously cast on.	A.—To work in two colours (so as to show a join) a hem of 5 inches. B.—To knit 12 rows of 12 loops with chain edge and cast off. C.—To join two pieces of calico 5 inches in length by a sewn seam (top sewing).	A.—To fix and work a sew and fell seam of 5 inches in cotton of two colours, so as to show a join in the cotton, both in seam and fell. B.—To cast on 12 loops, and knit 12 rows, ribbed purl, and plain, and afterwards cast off.	A.—To make a band and fix it for stitching, and work not less than 2½ inches, and sew on a string. B.—To cast on 30 loops and knit with 4 pins 10 rounds, breaking and joining the cotton at least once, and cast off. C.—To darn on single thread canvas, or on cheese cloth, 20 rows 1½ inches long, and to work 3 inches of herring-bone. D.—To fix and work a sew and fell seam of 5 inches in cotton, of two colours, so as to show a join in the cotton, both in seam and fell; turn down and fix for hemming the four sides of the (joined) material.

MATERIALS REQUIRED FOR THE EXERCISES IN EACH OF THE ABOVE GROUPS.*

N.B.—The sizes specified below are intended as a guide to teachers.

Infants, Lower Division (Optional).	Infants, Upper Division.	Standard I.	Standard II.	Standard III.
A.—A piece of calico $2\frac{1}{2}$ inches by 5, fixed for hemming, and coloured cotton.	A.—A piece of calico $2\frac{1}{2}$ inches by 5, fixed for hemming and coloured cotton. B.—A pair of knitting pins with 12 loops cast on and cotton.	A.—A piece of calico $2\frac{1}{2}$ inches by 5, fixed for hemming and cotton of two colours. B.—A pair of knitting pins and cotton. C.—Two pieces of calico 5 inches by $2\frac{1}{2}$, fixed for top sewing, and coloured cotton.	A.—Two pieces of calico 5 inches by $2\frac{1}{2}$, and cotton of two colours. B.—A pair of knitting pins and cotton.	A.—One piece of calico 5 inches by $2\frac{1}{2}$, and a piece of tape 2 inches long. B.—A set of 4 knitting pins and cotton. C.—A piece of single thread canvas or cheese cloth not less than 4 inches square. D.—Two pieces of calico 5 inches by $2\frac{1}{2}$, and cotton of two colours.

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* The material required should be carefully prepared and arranged beforehand. The quantity provided should be sufficient to furnish work for children grouped according to Rule 3; *e.g.*, for 24 children in Standard III. it will be sufficient to have four packets of material prepared for six children in each group.—*See* Note 3 in Schedule III. of the Code (needlework) as to "fixing" and "casting on."

In the following Table the requirements of the Code for each Standard are divided into groups of lessons of moderate length, any one of which may be given by the Inspector in their respective Standards.

Standard IV.	Standard V.	Standards VI. & VII.
A.—To gather and stroke down 7 inches, and fix into a band of 3 inches, and set in 1½ inches (right and wrong sides).	A.—To double down as for a band a piece of calico 3 inches square, fix it by tacking, cut and work a button-hole, and sew on a button.	A.—To cut out in paper the pattern of half of a yoked overall with one sleeve, and to make it up by tacking.
B.—To put in a flannel patch about 2 inches square.	B.—To cast on 25 loops, and with two needles knit the heel of a stocking, turn it, and cast off.	B.—To turn down a hem ¾ inch wide, to fix two tucks 5 inches long, and to run at least half of one.
C.—To cast on 15 loops and knit with two pins 15 rows, showing seam, stitch, and two decreasings on each side as for the back of a stocking, and to darn an irregular space about 1 (square) inch on stocking material.	C.—To plain darn a hole in stocking material.	C.—To put in a calico patch 2 inches square; or To put in a print patch 2 inches square.
D.—To cut out and tack together a child's chemise or a simple pinafore (plain or lined paper).	D.—To cut out (in paper) an infant's shirt, and to make it up by tacking; and to show on material how the arm-hole can be strengthened with a piece of tape.	D.—To run and fell together two pieces of calico 5 inches in length, and on a tacked hem work a button-hole as for the front of a shirt.
		STANDARD VII.
		A.—To sew and fell together 1 inch of two pieces of calico, and to put in a gusset as for the body of a shirt and stitch it across.
		B.—To darn on coarse linen a diagonal cut ½-inch long.
		C.—To darn on woollen material a three-cornered or hedge tear, the sides of the tear to be not less than ½ an inch.
		D.—To cut out in material and tack together a a reduced pattern of the garment selected for the year's work.

In schools, where needlework is not taken as a class subject, the following exercises will be omitted:—Standard IV., Group D; Standard V., Group D; Standard VI., Group A; and Standard VII., Group D.

MATERIALS REQUIRED FOR THE EXERCISES IN EACH OF THE ABOVE GROUPS.*

N.B.—The sizes specified below are intended as a guide to teachers.

Standard IV.	Standard V.	Standard VI. and VII.
A.—A piece of calico, 3 inches by 7, and a piece 3½ inches square.	A.—A piece of calico 3 inches square, and a linen button, unpierced.	A.—A piece of cutting-out paper (lined or plain) about a yard square.
B.—A piece of flannel 4 inches square, and a piece 2 inches square.	B.—A pair of knitting pins and cotton or wool.	B.—A piece of calico 5 inches square.
C.—A pair of knitting pins and cotton, and a piece of stocking-web 3 inches square.	C.—A piece of stocking-web material 3 inches square.	C.—A piece of calico 5 inches square and one 2½ inches square, and a piece of print 5 inches square and one 2½ inches square.
D.—A sheet of plain or lined cutting-out paper about a square yard.	D.—A sheet of cutting-out paper (plain or lined) about ¾ of a yard; and a piece of calico 4 inches square, and a piece of tape 3 inches long.	D.—Two pieces of calico, 5 inches by 2½.
		Standard VII.
		A.—Two pieces of calico, 5 inches by 2½, and one piece for gusset, square or triangular.
		B.—A piece of coarse linen 3 inches square.
		C.—A piece of woollen material (serge, cashmere, twill, flannel, &c.), 3 inches square.
		D.—A piece of thin calico about a yard square.

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* The material required should be carefully prepared and arranged beforehand. The quantity provided should be sufficient to furnish work for children grouped according to Rule 3; *e.g.*, for 24 children in Standard III. it will be sufficient to have four packets of material prepared for six children in each group.

See Note 3 in Schedule III. of the Code (needlework) as to "fixing" and "casting on."

SYLLABUS OF NEEDLEWORK EXERCISES FOR SMALL SCHOOLS.

In the following Table the requirements of the Code for each Group are divided into exercises of moderate length, any one of which may be given by the Inspector in their respective Groups.

Stage I.	Stage II.
A.—To work a sew and fell seam of 5 inches in cotton of two colours, so as to shew a join in the cotton, both in seam and fell.	A.—To gather and stroke down 7 inches, and fix it into a band of 3 inches, and set in 1½ inches (right and wrong sides).
B.—To knit 12 rows ribbed, purl and plain, and afterwards cast off.	B.—To put in a flannel, or a calico, or a pint patch 2 inches square.
C.—To make a band of calico 3 inches in length and to pleat into it a piece of calico 9 inches in length.	C.—To cast on 15 loops, and knit with two pins 15 rows, showing seam stitch, and two decreasings on each side as for the back of a stocking, and to darn an irregular space about 1 (square) inch on stocking material.
	D.—To double down as for a band, and on this cut and work a button-hole, one end round, the other braced, and to sew on a linen button.
	*E.—To cut out and tack together the pattern (full size) of a pinafore, chemise or other simple garment. * For the highest class only.

MATERIALS REQUIRED FOR THE EXERCISES IN EACH OF THE ABOVE GROUPS.

N.B.—The sizes specified below are intended as a guide to teachers.

Stage I.	Stage II.
A.—Two pieces of calico, 5 inches by 2½, and cotton of two colours.	A.—A piece of calico 3 inches by 7, and a piece 3½ inches square.
B.—A pair of knitting pins and cotton.	B.—A piece of flannel 4 inches square, and a piece 2 inches square. A piece of calico 5 inches square, and a piece 2 inches square. A piece of print 5 inches square and a piece 2 inches square.
C.—One piece of calico 3½ inches by 2½ inches, and one piece of calico 3 inches by 9 inches.	C.—A pair of knitting pins and cotton, and a piece of stocking web 3 inches square.
	D.—A piece of calico 3 inches square, and a linen button not pierced.
	E.—A piece of tissue paper about 1 square yard.

The material required should be carefully prepared and arranged beforehand. The quantity provided should be sufficient to furnish work for children grouped according to Rule 3; *e.g.*, for 20 children in Stage II. it will be sufficient to have five packets of material prepared for four children in each group.

PUPIL TEACHERS.

On the day of annual examination, an exercise will be given testing the pupil-teachers' knowledge of the needlework of their year, in accordance with the requirements of Schedule III.

Each pupil-teacher must provide herself with material as follows :—

1ST YEAR.

1 piece of calico 9 inches square.
1 piece of stocking-web material 4 inches square.
1 piece of tape 2½ inches long.
1 linen button (unpierced).
Suitable needles and sewing cotton.
1 sheet lined paper.

2ND YEAR.

1 piece of calico 9 inches square.
1 piece of print 6 inches square.
1 piece of flannel 6 inches square.
1 piece of tape 2½ inches long.
1 linen button (unpierced).
Suitable needles and sewing cotton.
1 sheet of sectional paper and a sheet of lined paper.

3RD YEAR.

1 piece of calico 9 inches square.
1 piece of coarse linen 4 inches square.
1 piece of woollen material 4 inches square.
1 piece of flannel 6 inches square.
1 piece of flannel binding ½-yard.
1 piece of tape 2½ inches long.
Suitable darning and sewing needles and cotton.
1 sheet of lined paper.
4 knitting pins and knitting cotton.

SYLLABUS OF CERTIFICATE-EXAMINATION

July, 1897.

SEWING AND CUTTING OUT (100 MARKS).

FIRST YEAR.

1. The repairing of any plain article of underclothing.
2. The drawing of diagrams on sectional paper—

   A woman's chemise.
   An infant's shirt.
   A pair of drawers for a child of five.

3. The cutting out and making of two of the above garments.
4. The answering on paper of questions on needlework.

SECOND YEAR (125 marks).

1.—The higher branches of plain needlework. These include tucking, whipping, and feather stitching; the repairing of linen and print, and darning in stocking-web stitch.

2.—The drawing of diagrams on sectional paper—

A woman's nightdress.
A boy's shirt.
A child's muslin pinafore.

3.—The cutting out and making of one of the above garments, and the cutting out and tacking together of the other two garments.

4.—The answering on paper of questions on needlework.

EXTRACT FROM "INSTRUCTIONS TO INSPECTORS."

"Special instructions as to the mode of conducting the test exercises in needlework will be found in Appendix I. The requirements in this subject, as set forth in detail in the Third Schedule, have been somewhat diminished; and when good methods are adopted can easily be fulfilled in three, or at most in four hours per week. When more time is thought to be necessary, the reason will probably be found either in the absence of skilled class-teaching and demonstration, or in the desire to make an unnecessary number of garments for sale or use. The plan of allowing the elder girls in turn, some five or six at a time, to bring from home, at the sewing lesson time, garments which require to be repaired has been found to work well, and to connect the school work usefully with the everyday domestic life of the scholars. Due heed will, of course, be needed in regard to sanitary considerations, but with this precaution the attention of the managers may be specially drawn to the 13th paragraph on needlework."

NEEDLEWORK AND THE CODE.

CIRCULAR to H.M. INSPECTORS.

The Lords of the Committee of the Privy Council have issued the following circular to H.M. Inspectors :—

[Circular 282.]

" Education Department,

" 5th April, 1889.

" Sir,—My Lords find that in the children's needlework, which has been examined by the Directress of Needlework at this Department, there were many instances of the materials having been prepared and fixed before they were distributed to the children. The table of exercises, in the Instructions to Her Majesty's Inspectors, distinctly prescribes that, except in and below Standard I., no fixing or preparation of pieces is allowable, and you should impress this rule upon the teachers. The children must themselves fold hems, draw threads for stitching, make bands, place tapes, fix buttons in position, cut button-holes, cut holes before patching, place patches, trace patterns, &c. It is the desire of my Lords that the needlework instruction in public elementary schools should be of a practical nature, and suitable to the wants of the children in after-life; it is therefore essential that children should know how to set about a given exercise in order to produce a certain result—their aptitude in fixing a patch the right side and way of the material is equal in importance to the neatness and regularity of the stitches. The correct fixing and preparation of the test specimens (by the children) must be taken into account in assessing the value of the needlework of a school; and in cases where assistance is given in such fixing or preparation, the teachers should be warned that any repetition of it at future examinations will be regarded as equally unfair with assistance in other parts of the examination.—I am, Sir, your obedient servant, P. CUMIN.

" To H.M. Inspector of Schools."

CIRCULAR TO H.M. INSPECTORS.

(NEEDLEWORK—CUTTING-OUT.)

"Education Department,

" Whitehall, London, S.W.,

" 22nd August, 1893.

" Sir,—My Lords have received from several quarters representations as to the difficulty of carrying out the requirements introduced into Schedule 3 of the Code for 1893, that garments made by girls in Standards V. and VI. should be cut out by their makers.

" My Lords consider that systematic instruction in cutting-out is a most important part of every satisfactory scheme for teaching needlework in elementary schools, and they are not prepared to alter the present rules, the object of which is that children in Standard IV. and upwards should by easy steps learn how to cut out garments of simple construction.

" But while declining to alter the Schedule in this particular, their Lordships are anxious not to make any undue demands on teachers or children who may be unable without longer preparation to satisfy the demands of the Code.

" I am, therefore, to request that in administering the Code of 1893 you will be careful not to insist too strictly on the exact fulfilment of the requirements of Schedule III. as to cutting-out. You should, however, satisfy yourself that graduated instruction in cutting-out has been given to all girls in and above Standard IV.

" I am to add that in order to give more time and opportunity for cutting-out, my Lords are considering whether it will not be possible in the Code of 1894 to modify the requirements of Schedule III. in certain other directions.—I have the honour to be, Sir, Your obedient servant, G. W. KEKEWICH."

ANNUAL GRANTS.

EXTRACTS FROM THE CODE, 1892, RELATING TO NEEDLEWORK.

GRANTS TO INFANT SCHOOLS OR CLASSES.

Art 98. Needlework grant.—(c.) A grant for needlework of 1s. if the scholars are satisfactorily taught needlework according to Schedule III.

N.B.—This grant is calculated on the average attendance of girls only, unless the boys are satisfactorily taught needlework. If the boys instead of needlework are satisfactorily taught drawing, a grant of 1s. for this subject may be made on their average attendance.

GRANTS TO DAY SCHOOLS FOR OLDER SCHOLARS.

Art. 101. Needlework grant.—(c.) A grant for needlework of 1s. if the girls are satisfactorily taught needlework according to Schedule III.

N.B.—This grant is calculated on the average attendance of girls only.

GRANT ON EXAMINATION IN CLASS SUBJECTS.

(*e*) A Grant for Class Subjects of 1s. or 2s. for a first class subject, and 1s. or 2s. for a second class subject.

The department shall decide which, if either, of these sums shall be paid, after considering the report and recommendation of the Inspector, on the examination of the scholars in such of the following subjects as are taken in the school:—

1. English, or Welsh (in Wales), or French (in the Channel Islands).
2. Geography.
3. Elementary Science.
4. History.
5. Object Lessons - for Standards I., II., and III.
6. Suitable Occupations Do. do.
7. Needlework (according to Schedule III.). } For Girls only
8. Domestic Economy. }

For any school year ending on or before 31st August, 1896, one Suitable Occupation will be sufficient.

The following rules are to be generally observed :—

(1) No more than two class subjects may be taken by any class, and the same number must be taken throughout the school ; except that where needlework is taken by the girls as a class subject a corresponding subject need not be taken by the boys.

(2) The subjects taken may be different for different classes, but in each class, if two subjects are taken, one of the subjects must be taken as the first, and the other as the second class subject.

(3) Drawing may not be taken as a suitable occupation in any school receiving a grant for drawing from the Science and Art Department.

(4) For any school year beginning after the 31st August, 1896, object lessons must be taken as the first class subject in Standards I., II., and III. (or in the lower group in schools taking Schemes in Schedule S).

(5) Needlework if taken as a class subject must be so taken by all the girls throughout the school, and in this case the school cannot receive the grant of 1s. under Article 101 (*c*)

(6) If the girls in a mixed school take needlework and the boys another subject, the grant may be paid on the average attendance of boys and girls separately.

(7) All scholars present at the inspection are liable to be examined in any class subjects that are taken in their class.

(8) The examination of the scholars varies according to their Standards.

A scheme for examination in class subjects is set out in Schedule II. But if the managers desire, they may submit to the Inspector at his annual visit, or within one month of the end of the school year. and the Inspector may approve for the ensuing year, any progressive scheme of lessons in these subjects, having a similar scope and aim. Examples of alternative schemes which have been approved by the Department will be found in the Supplementary Schedule following Schedule II.

(9) Scholars presented for examination need not be in the same Standards in class subjects as in elementary subjects, nor need they be presented in the same Standards in both class subjects. All scholars should be examined in the class subject in the classes in which they are taught, and in ordinary circumstances they should be advanced not less than one Standard in a year.

(10) The examination should, as a rule, be oral.

NEEDLEWORK, 1895.

Report for the Year 1895, by the Hon. Mrs. Colborne, Directress of Needlework.

MY LORDS,

I have the honour to submit my annual report on the needlework of the students in training colleges, of acting teachers, of pupil teachers, and of school children.

The college course of study during 1895 only extended over six months; it was therefore under the disadvantages incidental to this arrangement that the students were examined in needlework. They, on the whole, acquitted themselves creditably, but the effects of the shortened period of training were noticeable in the demonstration lessons; ease of manner and a ready power of explanation can only be gained by constant practice in teaching, last year the time available for this purpose was very limited. The same cause affected the quality of the needlework in the test exercises at the certificate examination; the average marks gained by the students were 74·8; those of the acting teachers were 62·1.

The work of the pupil teachers during the past year does not demand special comment; the quality of the exercises varied but little from that of former years. The syllabus of requirements (1896) has been reduced, in the hope that with less to do, the pupil teachers may give greater attention to the specified exercises, and may master them more thoroughly.

The number of children whose needlework was examined by myself or staff was smaller than in preceding years; this was due to the fact that the schools selected for examination were principally rural ones with but few scholars on the roll.

The number of schools (where the needlework could be classified as excellent or very good) was also smaller than last year; this was not, I believe, owing to a general falling off in the teaching of the subject, but was to be accounted for by remembering that many of the most efficient schools had been exempted from an annual examination, and it was consequently from the weaker ones of a district that the needlework specimens had been sent up.

Of the 1,020 schools examined last year, 633 were awarded the higher grant, 363 were marked "fair," and 24 did not rise above "moderate."

I beg leave to submit to my Lords the special reports on the various training colleges.

I have the honour to be, &c.,

RHODA E. COLBORNE.

To the Right Honourable
The Lords of the Committee of Council on Education.

REPORTS ON THE TRAINING COLLEGES, 1895.

BISHOP'S STORTFORD.

SECOND YEAR STUDENTS.

The class lessons showed careful preparation, many were excellent; the needlework, especially the shirts, was most satisfactory.

Miss Crook is a most painstaking teacher.

FIRST YEAR STUDENTS.

The test exercises were well done; but some of the illustrations of the needlework papers were weak.

BRIGHTON.

SECOND YEAR STUDENTS.

The oral examination was very satisfactory, the demonstrations on the black-board were clear and to the point.

The test exercises at the certificate examination did not gain very high marks, owing to the faulty fixing of the shirt pattern.

FIRST YEAR STUDENTS.

The theory papers were excellent, and were well illustrated. The needlework exercises were also very satisfactory, but in the diagrams of garments some of the essential parts were frequently omitted.

BRISTOL (FISHPONDS).

SECOND YEAR STUDENTS.

The oral examination was satisfactory, though a few of the students showed but little teaching skill. The exercises in pattern making were generally good, but the average marks of the class should have been higher.

FIRST YEAR STUDENTS.

The test exercises gave promise of future good work, and the papers were written with care.

CHELTENHAM.

SECOND YEAR STUDENTS.

Much care had been bestowed on the preparation of the various lessons; they were generally good and practical ones. The average standard attained both in the diagrams and needlework was satisfactory.

FIRST YEAR STUDENTS.

The text and illustrations of the needlework papers were very good, but a more methodical arrangement of the various facts would have increased their value.

CHICHESTER.

SECOND YEAR STUDENTS.

The students taught well and intelligently; their paper patterns were good, and the needlework exercises earned good marks.

FIRST YEAR STUDENTS.

The subject matter of the papers was well illustrated by good diagrams. Many of the exercises at the certificate examination were only partially done.

DARLINGTON.

SECOND YEAR STUDENTS.

The lessons reached a high standard; several were excellent. The test exercises at the certificate examination were carried out with neatness and care.

FIRST YEAR STUDENTS.

The papers were well written and well illustrated.

DERBY.

SECOND YEAR STUDENTS.

Many of the lessons were thoroughly good ones; the finished needlework (garments, exercises, &c.) were also very satisfactory. At the certificate examination the paper work earned high marks, but the stitches in the needlework exercises did not, in many cases, rise above fair.

FIRST YEAR STUDENTS.

The general results of the examination were not as satisfactory as I could have wished.

DURHAM.

SECOND YEAR STUDENTS.

The oral examination of the students gave very satisfactory results, but the test exercises at the certificate examination failed to secure high marks. The students, unfortunately, had had the disadvantage of losing (for a time) the valuable teaching of their needlework instructress, Miss Skinner, who for many weeks was seriously ill, the break in the regular lessons, and the shortness of the college year of 1895, affected the quality of the work at the June examination.

FIRST YEAR STUDENTS.

The theoretical papers were carefully written and well illustrated, but a want of finish in the needlework exercises caused a loss of marks.

EDGEHILL.

SECOND YEAR STUDENTS.

The various appliances needed for the model lessons had been carefully prepared by the students, who by their brightness of manner succeeded in awakening and keeping up the attention of their classes. The patterns and needlework exercises at the Certificate Examination were good.

FIRST YEAR STUDENTS.

Sensible papers were illustrated by good diagrams; the needlework exercises at the certificate examination also gained good marks.

HOME AND COLONIAL.

SECOND YEAR STUDENTS.

The average quality of the students' class teaching was not satisfactory; several of the lessons were a little more than a repetition of the words of a manual, or a statement of a few facts connected with some exercise in needlework. The test exercises at the June examination failed to earn good marks; the patterns were incomplete, and many of the needlework exercises showed weakness.

FIRST YEAR STUDENTS.

The work of the junior students was much better than that of the senior students; their theoretical papers were well written.

HOMERTON. (CAMBRIDGE.)

SECOND YEAR STUDENTS.

The teaching skill of the students was much higher than last year; several of the lessons were very good. The practical work at the June examination was not equal to that of last year.

FIRST YEAR STUDENTS.

The needlework exercises were very well done, and the diagrams were neatly executed. The general results of the examination were excellent.

LINCOLN.

SECOND YEAR STUDENTS.

Great accuracy and careful attention to details have always distinguished the lessons at this training college; there was this year no falling off in the character of the work. The students, however (at the certificate examination), carried their attention to detail too far, and consequently accomplished but little during the two hours devoted to the subject; marks for industry were therefore lost.

FIRST YEAR STUDENTS.

In the majority of cases the papers did not reach a high standard; the explanations were much involved and the diagrams poor. In the practical work some excellent patterns were shown, and the needlework exercises were well done.

LIVERPOOL.

SECOND YEAR STUDENTS.

Excellent lessons, both the diagrams and finished needlework, were very good; the results of the June examination were also most satisfactory.

FIRST YEAR STUDENTS.

The needlework exercises of the junior students reached a satisfactory standard, although there was a certain lack of finish in some of them.

NORWICH.

SECOND YEAR STUDENTS.

The lessons were extremely good ones; the students taught with energy, and made their instruction interesting. Their practical work at the June examination also reached a satisfactory standard.

FIRST YEAR STUDENTS.

The information in the needlework papers was correct and well arranged. The test exercises were worked with neatness, and the diagrams showed correct proportions.

OXFORD.

SECOND YEAR STUDENTS.

Excellent lessons, which were illustrated by thoroughly good diagrams. The practical work of the majority of the students reached a high standard.

FIRST YEAR STUDENTS.

The results of the examination were most satisfactory.

RIPON.

SECOND YEAR STUDENTS.

The lessons were of a far higher quality than hitherto; the students were ready with the chalk, and illustrated the subjects of their lessons by good diagrams. The patterns at the Certificate Examination were well and carefully drawn, but some of the needlework exercises showed weakness.

FIRST YEAR STUDENTS.

Many of the papers were excellent, and the general character of the needlework tests and diagrams was good.

SAFFRON WALDEN.

SECOND YEAR STUDENTS.

One or two of the students were excellent teachers, but the greater number of the lessons were not distinguished by great brilliancy. The finished needlework was excellent. At the June examination the patterns were well and neatly done.

FIRST YEAR STUDENTS.

A satisfactory examination in all points, well written papers, good diagrams, and neat needlework.

SALISBURY.

SECOND YEAR STUDENTS.

The students displayed readiness and ease in illustrating their lessons on the blackboard, but the oral part of the examination showed a little weakness. The test exercises were very satisfactory.

FIRST YEAR STUDENTS.

The answers to the questions on needlework were well expressed, but the diagrams were weak. The work at the June examination deserved good marks.

SOUTHLANDS.

SECOND YEAR STUDENTS.

A satisfactory standard of teaching efficiency was shown in the students' class lessons, many of which were illustrated by good rough diagrams. The patterns and needlework exercises at the June examination were often excellent.

FIRST YEAR STUDENTS.

The results of the examination were not quite as satisfactory as were those of the senior students, the needlework exercise showed some weakness; the diagrams, however, deserved good marks.

STOCKWELL.

SECOND YEAR STUDENTS.

The lessons had been thoroughly well prepared, and produced most satisfactory results. The test exercises at the June examination were very well done.

FIRST YEAR STUDENTS.

The theoretical and practical parts of the needlework examination were equally satisfactory.

SWANSEA.

SECOND YEAR STUDENTS.

The class lessons were excellent; there was a brightness about them which added greatly to the interest and value of the instruction. The practical work at the June examination was likewise very satisfactory.

FIRST YEAR STUDENTS.

The theoretical questions were answered with intelligence, and illustrated by good diagrams; the needlework exercises were somewhat weak.

TOTTENHAM.

SECOND YEAR STUDENTS.

Care had been given to the preparation of the class lessons, but the actual teaching did not show great brilliancy. The execution and finish of the practical work deserved praise.

FIRST YEAR STUDENTS.

A high standard in needlework was reached by the students; their theoretical and practical examinations were most satisfactory.

TRURO.

SECOND YEAR STUDENTS.

A thoroughly satisfactory examination. The class lessons were very good, the paper patterns excellent, and the needlework exercises carefully carried out.

FIRST YEAR STUDENTS.

A great deal of good work was to be found both in the papers and the test exercises.

WANDSWORTH.

SECOND YEAR STUDENTS.

The oral examination was most satisfactory; there was a marked advance in the quality of the lessons; the students were animated in manner and accurate in their statements; they had written excellent notes on their lessons, and had illustrated them with care. The test exercises were somewhat weak, and only part of the needlework exercises was done, and the quality of that part was poor.

FIRST YEAR STUDENTS.

The papers were generally well done, though the information they contained was in some cases rather meagre. Greater finish must be aimed at in the pattern drawing and needlework exercises.

WARRINGTON.

SECOND YEAR STUDENTS.

The students went about their work in a business-like way; their lessons were, in general, clear and to the point; the children followed the teaching with interest. The needlework exercises at the June examination were not satisfactory; the buttonholes were poor, and there was a general lack of finish about the specimens; the greater number of the paper patterns were good.

FIRST YEAR STUDENTS.

The theoretical and practical branches of the examination were equally satisfactory.

WHITELANDS.

SECOND YEAR STUDENTS.

Notwithstanding the short time the students had had for practice in teaching needlework (I visited this college in April), they were ready for any lesson selected by me, and acquitted themselves well; their diagrams were very good. The quality of the work in the test exercises did not reach a high average.

FIRST YEAR STUDENTS.

The theoretical papers were generally very good, and the needlework tests were worked with care.

DAY TRAINING COLLEGES.

ABERYSTWITH.

SECOND YEAR STUDENTS.

The students in the normal departments of the various Day Training Colleges are able to give but a limited time to needlework, and it is consequently with some difficulty that they attain a fair knowledge of the subject. Greater practice in class teaching is much needed. The students at Aberystwith did as well as could be expected, but they decidedly work under disadvantages. The test exercises were carefully carried out; many of the patterns were very good.

FIRST YEAR STUDENTS.

Some of the written work was excellent, but several of the papers contained little or no information, and were poorly illustrated.

BANGOR.

FIRST YEAR STUDENTS.

The average quality of the needlework was good, but the diagrams, though correct, were wanting in finish.

BIRMINGHAM.

SECOND YEAR STUDENTS.

Several of the lessons were excellent; the garments were carefully made, but at the Certificate Examination the needlework tests seldom rose above fair, and the paper patterns did not earn good marks.

FIRST YEAR STUDENTS.

The information in the theory papers was correct, but very meagre, and there was a great want of finish in the test exercises.

BRISTOL.

SECOND YEAR STUDENTS.

The lessons showed good sound grounding, but the practice of examining *before* instructing must be discouraged. At the June examination the patterns were generally good, but much of the needlework was very poor.

FIRST YEAR STUDENTS.

The needlework exercises did not reach a high standard.

CARDIFF.

SECOND YEAR STUDENTS.

Correct information was given in the class lessons, but they were lacking in interest; only a few of the students gave evidence of strong teaching power. The needlework was good.

FIRST YEAR STUDENTS.

The needlework tests were well done; the flat patterns were also well drawn; but the measurements were often incorrect.

MANCHESTER.

SECOND YEAR STUDENTS.

The students had thoroughly prepared their lessons; they had evidently not had much practice in teaching children, and were consequently apt to omit details, without which much of the instruction would have been valueless. The test exercises did not reach a high standard of merit.

FIRST YEAR STUDENTS.

The needlework of the junior students was very satisfactory; high marks were obtained in both sections of the test, and in the theoretical papers.

NEWCASTLE.

SECOND YEAR STUDENTS.

The garments and specimens were excellent. The class lessons were most thorough; the students had carefully prepared the material needed by the scholars, whom they taught in a bright and sympathetic manner. The marks for skill in teaching headed the list = 90 per cent.

FIRST YEAR STUDENTS.

The needlework exercises seldom rose above fair, and the theoretical papers were meagre in details; the diagrams showed weakness.

NOTTINGHAM.

SECOND YEAR STUDENTS.

The oral examination was very satisfactory; much of the teaching was extremely good. I was particularly pleased with the well ordered arrangement of the materials and appliances needed for the class lessons. The needlework tests at the June examination were somewhat weak.

FIRST YEAR STUDENTS.

The test exercises were generally well done, but some weakness was shown in the drawing of the flat patterns.

SHEFFIELD.

SECOND YEAR STUDENTS.

There was decided improvement in the teaching powers of the students, but several of the lessons were little more than a reproduction of text books. The needlework exercises and the paper patterns were well done.

FIRST YEAR STUDENTS.

Care was shown in the needlework papers, and many of the practical exercises were well done, but the diagrams were sent up in a very unfinished condition.

TESTS SET AT RECENT EXAMINATIONS.

PROBATIONERS AND CANDIDATES.

(One hour allowed.)

GIRLS ONLY.

Probationers (Art. 33).

1896. October.—Cut out, in paper, an infant's shirt, and make it up by tacking; and show on material how the armhole can be strengthened with a piece of tape.

Candidates (Art. 35).

Sew and fell together one inch of two pieces of calico, and put in a gusset as for the body of a shirt and stitch it across.

PUPIL-TEACHERS.

First Year.

(One hour allowed.)

1889. April.—Make a wristband (closed or open) for a boy's nightshirt.

1889. October.—Gather and stroke a length of calico (6 inches) and set it into a band. Put on a tape and a button.

1890. April.—Set in a calico patch (2 inches square), complete not less than half of it, on both right and wrong sides. Cast on 21 loops, knit as for the back of a stocking, showing 2 decreasings.

1890. October.—Cut out and tack together a paper pattern of a chemise, suitable for a child in Standard III. (8 or 9 years old), and knit the heel of a boy's sock; or,
Mend, common method, a hole (not less than half an inch square) in stocking-web material.

1891. April.—Make a closed wristband for a boy's nightshirt, and stitch not less than half of it.

1891. October.—Cut out and tack together the upper part of a girl's chemise. Make a buttonhole, and sew on a button.

1892. April.—Make a wristband for a boy's shirt; stitch three inches of it; sew on a button and make a button-hole.

1892. October.—On a piece of calico (9 inches square) fix a hem and two tucks. Show at least 3 inches of hemming and run half of each tuck.
Cut out in paper and tack together the sleeve of a boy's nightshirt.

1893. April.—Make a calico band 3 inches in length, put on a button and make a buttonhole. Gather, stroke and set in (by tacking) 6 inches of calico.
Marks will be given for industry and general finish.

1893. October.—Darn a hole (half an inch square) on stocking material, and fix on calico (by tacking) a hem, a sew and fell seam, and a tuck; each of the exercises to be 3 inches in length.

1894. April.—Cut out in paper and make up by tacking an infant's first shirt, and show, on calico, how the gusset of the arm-hole should be made and set in.

1894. October.—Cut out in paper and tack together half the front, and half the back of the upper part of a small nightgown, and make up, in calico, half a collar or neck-band suitable for the nightgown.

1895. April.—Cut out a cooking apron in paper. make it up by tacking, and (as far as time permits) show, on calico, the various stitches used in making up the apron.

1895. October.—Make up your piece of calico as the front opening of a night-shirt; sew on a button, and make a button-hole.

1896. April.—Make up your piece of calico (9 inches by 9 inches) as the sleeve and shoulder of a chemise; and
Cut out in paper and tack together the sleeve of a small night-gown.

1896. October.—Cut out in paper and tack together the sleeve of a man's nightshirt; and
Make up your piece of calico as the wristband of a night-shirt.

Second Year.

(One hour allowed)

1889. April.—On a piece of calico, 9 inches in length, fix a hem and three tucks.
Show at least 6 inches of hemming, and run half of each tuck.

1889. October.—Set in a triangular patch in flannel. Work a buttonhole on calico, as for the front of a shirt.

1890, April.—Make up your piece of calico (9 by 9) in the form of a child's petticoat. Fix a hem and tucks round the bottom, and (if time permits) hem and run them.

1890. October.—Set in and complete a print patch 2 inches square. Cast on 15 loops and knit 15 rows, showing two decreasings on each side of the seam-stitch; or
Draw to scale (¼ size), on sectional paper, the yoke and collar of a woman's nightgown. Make a buttonhole.

1891. April.—On a piece of calico show at least 2 inches of each of the stitches required in the making of an infant's night-gown.

1891. October.—Set in and complete a print patch (2 inches square). Fix (by tacking) a triangular flannel patch.

1892. April.—Make up in print a short sleeve or a child's frock. Draw the flat pattern of a boy's shirt (¼ size).

1892. October.—Set in and herring-bone a triangular flannel patch. Draw to scale (¼ size) the flat pattern of a woman's night-gown.

1893. April.—Draw half the front, half the back, and one sleeve of a boy's shirt on sectional paper. Fix a print patch, 2 inches square, and work at least half of the right and wrong sides.

1893. October.—Set in and herring-bone a flannel patch (2 inches square); and cast on 21 stitches, knit 12 rows, showing how you would make the intakes at the back of a stocking.

1894. April.—Fix and work a calico false hem cut on the cross 4 inches in length; and
Fix and work a calico false hem cut on the straight 4 inches in length, finishing it with stitching.

1894. October.—Cut out in paper and tack together a boy's shirt sleeve; and make up in calico a wristband suited to the sleeve.

1895. April.—Cut out in paper, and make up, by tacking, the left-hand half of a boy's shirt; and set in a flannel patch (by tacking).

1895. October.—Knit the last twelve rows on the toe of a man's sock; and
Fix a calico patch, working as much of it as time permits.

1896. April.—Cut out in paper, and make up by tacking, the upper part of a boy's shirt; and
Show on calico how you make the buttonhole of a wristband.

1896. October.—Cut out in paper, and make up by tacking, the right hand half of a girl's overall ($\frac{1}{2}$ inch scale); and
Show on print the stitches used in making an overall.

Third Year.

(One hour allowed.)

1889. April.—Darn a hole on stocking-web (common method).
On a band of calico, work two different kinds of buttonholes.

1889. October.—Shew on calico how the opening in front of a chemise or nightdress is made, and complete the specimen as far as time will permit.

1890. April.—Make up your piece of print (6 by 6) as parts of the back widths of a child's frock body. Sew on a button and make a buttonhole.

1890. October.—Take a piece of flannel 4 inches square, bind two sides of it with flannel binding, showing a corner, and herring-bone the other two sides; or,
Cut out and tack together a paper pattern of one leg of a child's pair of drawers. Show on a piece of calico how you would place a strengthening tape at the side opening of a child's drawers.

1891. April.—Cut out in lined or tissue paper, and tack together a frock bodice, suitable for a child of three.
Darn over a space of an inch and a half, as for a thin place in flannel.

1891. October.—Join together two pieces of flannel (representing the widths of a petticoat); bind the bottom edge.

1892. April.—Make and put in a gusset as for the side opening of a child's pair of drawers. Cut out in paper and tack together one leg of a child's pair of drawers.

1892. October.—Cut out in paper and tack together a child's frock bodice (two to four years of age).
Darn a cross-cut (¾ of an inch long) on coarse linen.

1893. April.—Cut out and tack together one leg of a child's pair of drawers (three to five years old). Show how you would make the placket hole of a flannel petticoat.

1893. October.--Cut out in paper and tack together one leg of a child's pair of drawers. Work two different kinds of button-holes as for the front band of the drawers.

1894. April.—From a square of calico (9 by 9) make a round or shaped band suitable for a flannel petticoat; make a button-hole, and, if time permit, stitch the band.

1894. October.—Darn on woollen material a hedge tear (the sides of the tear being not less than one inch in length); and show on flannel how a thin place should be darned.

1895. April.—Cut out in paper, and make up (by tacking) half of a child's frock bodice, including a sleeve; and show on flannel how you would complete the armhole of an infant's long flannel.

1895. October.—Cut out in paper a woman's gored petticoat, and make it up by tacking (¼ size); and bind two sides of a piece of flannel (4 inches square), showing how the corner is done.

1896. April.—Darn a three-cornered tear on woollen material; and Cut out in paper and tack together an infant's long flannel (½ size).

1896. October.—Bind two sides of a square of flannel (4 in. square) showing a corner; and
Cut out and tack together a gored petticoat (paper), (¼ inch scale).

TESTS SET AT THE SCHOLARSHIP EXAMINATIONS FOR ADMISSION TO A TRAINING COLLEGE.

(Two hours allowed.)

Practical Work.

July, 1886.—(1) Cut out and tack together, a paper pattern of the front, half the back and one short sleeve of a frock body, for a child of five years.

(2) Make up the material supplied into the form of an apron, showing hemming, seaming, gathering and setting-in. Make a bottonhole. Sew on a button, and if time permits, fix and run two tucks.

Marks will be given for industry and general finish.

Material supplied.—Cutting-out paper about ¾ yard square. Calico, 9 inches square. A linen button.

July, 1887.—(1) Cut out and tack together a paper pattern of one leg of a pair of drawers for a child of three years.

(2) Make up the material supplied into the form of an apron, showing hemming, seaming, gathering setting-in, and stitching. Mark "A" and fix and run two tucks.

Marks will be given for industry and finish.

Material supplied. — Cutting-out paper, 18 by 22. Calico, 9 inches square.

July, 1888.—(1) Cut out and tack together a paper pattern of half a chemise, suitable for a child of six years of age, indicating in the different parts of the garment the selvedge way of the material.

(2) On the calico supplied, show the following stitches :—Hemming, seaming, stitching, feather-stitching and button-holing.

Marks will be given for industry and finish.

Material supplied. — Cutting-out paper, 36 by 18. Calico, 6 inches square.

July, 1889.—(1) Cut out and tack together a paper pattern (full size) of half the front and half the back of the upper part of an infant's nightgown. Make up one sleeve and fix it into the garment.

(2) On the calico supplied, show the following stitches :—Hemming, gathering, setting-in, stitching, and tuck-running. Sew on a tape, and mark (in cross-stitch) the first letter of your surname.
Marks will be given for industry and finish.
Material supplied. Cutting out paper $\frac{3}{4}$ yard square. Calico 5 inches by 8. Tape $2\frac{1}{2}$ inches long.

July, 1890.—(1) Cut out and tack together a paper pattern of the front, half the back, and one short sleeve of a frock body, suitable for a child of three years of age.

(2) Hem the enclosed square of calico, and work 2 inches of stitching and 2 inches of feather-stitching. Make a buttonhole. Mark the initials R. C. (cross-stitch).

Materials supplied. Cutting out paper $\frac{3}{4}$ yard square. Calico 6 inches square.
Marks will be given for industry and finish.

July, 1891.—(1) Cut out and tack together one-half (back and front) of the upper part of a nightshirt ($\frac{1}{2}$ size.)

(2) Make the wristband of a shirt ($\frac{1}{2}$ size), stitch it and make a buttonhole.
Marks will be given for industry and finish.

July, 1892.—(1) Cut out and tack together the paper pattern ($\frac{1}{2}$ size) of an infant's nightgown.

(2) Make up, in calico, the sleeve (full size) of an infant's nightgown. Mark in cross-stitch the initials V. R.

Marks will be given for industry and finish.

July, 1893.—Section A: Cut out in paper and make up, by tacking, a woman's gored flannel petticoat (half size); and set in a calico patch, not less than 2½ inches square. Mark the letters E. D. (cross stitch); or,

Section B: Cut out in paper and make up, by tacking, an infant's long flannel (half size); and make up the enclosed piece of calico in the form of a woman's apron, showing hemming, seaming, gathering or pleating, stitching and tuck running.

Marks will be given for industry and finish.

July, 1894.—Section A: Cut out in paper and make up, by tacking, one leg of a girl's pair of drawers (⅓ size); and make up the enclosed piece of calico as the lower or knee part of knickerbocker drawers; stitch or feather-stitch the knee band; or,

Section B: Cut out in paper and make up by tacking, a woman's gored flannel petticoat (¼ size); and make up the enclosed piece of calico as a round or shaped band, set on a button, and make a buttonhole.

Marks will be given for industry and finish.

December, 1894.—Section A: Cut out in paper and make up by tacking a round or shaped petticoat band; and cut out and make up the enclosed piece of calico in the form of a chemise sleeve; or,

Section B: Cut out in paper a girl's chemise (half size), and make it up by tacking; and make a neck-band of calico; stitch, or feather-stitch it, and make a buttonhole.

Marks will be given for industry and finish.

December, 1895.—Section A: Cut out in paper (¼ size) a pair of drawers, suitable for a girl of ten; make them up by tacking; and set in a flannel patch, not less than 2 inches square; work part of the right side and part of the wrong side; or,

Section B: Cut out in paper a girl's flannel petticoat (¼ size), and make it up by tacking; and
Show on the accompanying piece of flannel how the placket-hole of a petticoat is made.

Marks will be given for industry and finish.

December, 1896.—Section A: Cut out in paper, and make up by tacking, a chemise suitable for a girl of eight (½-inch scale); and gather 6 inches of calico into a band of 3 inches; work a buttonhole on the band; or,

Section B: Cut out, in paper, one leg of a pair of drawers suitable for a girl of eight; make it up by tacking; and fix a hem and two tucks (6 inches in length), and work at least 2 inches of hemming and running.

Marks will be given for industry and finish.

THEORETICAL QUESTIONS ON NEEDLEWORK, WHICH HAVE BEEN SET AT THE SCHOLARSHIP EXAMINATION.

Domestic Economy Paper (Section I).

(One Question only to be Answered.)

1880.—(1) State (1) the amount of material required for a plain cotton frock with short sleeves for a child of four years; (2) the length of the body and skirt of the frock; (3) the size of the arm-hole and the size round the arm; (4) also the length of the waistband.

(2) The principal stitches required for making articles of clothing are, (1) hemming; (2) sewing; (3) felling; (4) running; (5) gathering; (6) whipping; (7) stitching; (8) back-stitching; (9) herring-boning. Distinguish between these different stitches, and explain simply but clearly Nos. 3, 6 and 8.

1881.—(1) Describe fully the different stages of instruction by which a child would advance from her first lesson in knitting to making a stocking for a full-grown man.

(2) State the amount of material required, and the kind of material best suited, for making a shirt for a boy of 12, and give accurate measurements of its different parts.

1882.—(1) Describe fully the following stitches, and say in what garments and materials they are commonly used, and how you would teach them to children:—Hemming, felling, back-stitching, feather-stitching, (*i.e.*, coral stitching).

(2) Describe the process of cutting out and making a pinafore for a girl of six years old, with exact measurements, and an account of the material required.

1883.—(1) Explain how you would put on a patch 2 inches square in (A) a tablecloth, and (B) a flannel petticoat; describe the best mode of knitting the toe of a full-sized stocking; give directions for cutting out a shirt for a labouring man's son of seven years of age, and state the quantity, quality, and price of the most suitable material for the purpose.

(2) What stitches would be required in making the sleeve of a man's shirt? Explain any two of them as you would to children.

1884.—(1) Give directions for cutting out a baby's frock. State what stitches should be used in making it, and what buttonholes you would use in the back.

(2). Explain, as to a Second Standard, how to purl; and as to a Sixth Standard, how to whip and set on a frill.

1885.—(1) State the needlework requirements of the Code for female pupil-teachers of the fourth year of apprenticeship;

and describe the method of cutting out and putting together a child's pinafore, showing what stitches would be required.

(2) Give directions suitable to a class of young children for (a) sewing on a string; (b) sewing on a button; (c) knitting a pair of plain muffatees (two needles).

1886.—(1) What materials and appliances would be required for the teaching of needlework to Standards III. and IV.; and what ought children in those Standards to be able to do in order to fulfil the requirements of the Code?

(2) Explain in what way the methods of patching flannel, calico, and print differ from each other, and give the reason for the difference.

1887.—(1) Give a sketch of the graduated lessons in needlework up to Standard III. inclusive, which you would think suitable for children in a Mixed School (G and I.); the requirements of the Code being fulfilled.

(2) Describe the different methods of darning, and the purposes of the stitch, naming the garments and materials on which it is generally used.

1888.—(1) What is meant by the term "Plain Needlework?" Give a short description of the stitches, materials, and implements used in the making (by hand) of those garments which are comprised in the expression "Underclothing."

(2) Describe the different kinds of patching in common use.

1889.—(1) What do you understand by the term "Gathering?" For what purpose is it employed?

Give rules for gathering and setting into a band, and say what points should be noticed in teaching the stitch to a class of girls.

(2) Name and fully describe all stitches used in completing—
(A) A woman's nightdress; or
(B) A full-sized flannel shirt.

State the quantity of material required for each and its cost.

1890.—(1) State what is meant by the expression "Household Linen." Name the articles, the materials of which they are made, and the approximate value of a stock of household linen suitable for a cottager's family, consisting of a man, his wife, and two children.

(2) How would you make use of 12 yards of calico, medium quality, in providing underclothing for three children (a boy of four and two girls of six and eight years of age)? State the amount of material used in each garment.

1891.—(1) A useful outfit has to be provided for a school girl, 14 years of age, who is going into domestic service as a nursemaid. State what garments you would give her, the kind and amount of materials to be used in each garment, and the cost, in detail, of the outfit.

(2) By what means could you make worn sheets and tablecloths fit for further use, or how could you otherwise utilise them?

(3) Give the reasons for and against the use of a sewing-machine in a household.

1892.—(1) Describe the principal articles of clothing made by hand-knitting and show, by your statements, that instruction in the subject is of value to children in their school and home life.

(2) Calico, flannel, and linen are extensively used in underclothing; give some account of the way in which these materials are produced. What considerations should guide you in selecting flannel for an infant's garments and for men's shirts?

TESTS SET FOR STUDENTS IN TRAINING COLLEGES

First Year Certificate.

(Three Hours Allowed.)

1884. December.—Cut out the front, half the back, and one sleeve of a frock body for a child three years of age. Fix these together, and work as much of each of the following stitches as time permits:—Sewing and felling, gathering, stroking, and setting-in. Sew on a button, make a buttonhole, and mark a letter (G).

Marks will be given for industry and general finish.

1885. December.—(1) Cut out and fix together a paper pattern of half a pair of drawers for a child three years of age.

(2) Fix and work a patch in calico not less than 2 inches square.

(3) Plain darn a hole in stocking-web material.

(4) Fix a band about 2 inches long, and on it sew a button and work a buttonhole.

Marks will be given for industry and general finish.

1886. December.—(1) Cut out and tack together half the front and half the back of a frock body for a child three years old.

(2) Make the lower part of a nightshirt sleeve, the wrist band to be closed and stitched, and show the following stitches; gathering, stroking, and setting-in, stitching.

1887. December.—(1) Draw a diagram of a woman's chemise (¼-inch scale).

(2) Give directions for making up the garment.

(3) Set in a triangular flannel patch, and darn on it as for a thin place.

1888. December.—(1) Cut out and make up an infant's first shirt (lined paper).

(2) On the piece of calico enclosed (6 by 6), show not less than 3 inches of the following stitches:—Hemming, sewing, stitching, and feather-stitching.

(3) Darn a hole in stocking-web material (common method).

Marks will be given for industry and general finish.

1889. December.—(1) Cut out in paper and make up one leg of a pair of drawers for a child of from three to five years of age.

(2) Make up the calico supplied in the form of a woman's apron, showing the following stitches:—Gathering, setting-in, hemming, sewing.

(3) Put on a button and make a buttonhole.

Marks will be given for industry and general finish.

1890. December.—(1) Cut out and tack together one leg of a child's pair of drawers.

(2) On the calico supplied show the stitches required in making up the above garment.

Marks will be given for industry and general finish.

(Two Hours allowed.)

1891. December.—(1) Draw a diagram on a sectional paper of an infant's shirt.

(2) Describe briefly how you would make it up.

(3) On the calico enclosed, work not less than 2 inches of each stitch required in making the garment.

(4) Set in and work a flannel patch 2 inches square.

Marks will be given for industry and general finish.

1892. December.—(1) Cut out in lined paper and make up a woman's chemise (½ size).

(2) Make up the calico (enclosed) in the form of a chemise sleeve (full size) showing the following stitches:—Seaming, felling, stitching and feather-stitching.

(3) Mark the initial letter of your surname in cross-stitch.

Marks will be given for industry and general finish.

1893. December.—(1) Draw a diagram on sectional paper, of a child's pair of drawers (four to six years of age).

(2) Make up in calico, the front waistband of the drawers, work the centre buttonhole and one of the side ones

(3) Mark your initials (two) in cross-stitch on the band.

Marks will be given for industry and general finish.

1894. December.—(1) Cut out and make up, in lined paper, the upper half (back and front) of a woman's chemise; and

(2) Show, on the calico supplied, how the front opening of a chemise is made. Make a buttonhole.

Marks will be given for industry and general finish.

1895. June.—(1) Make up the enclosed piece of calico as the sleeve of an infant's first shirt; put in a gusset; and

(2) Draw, on sectional paper ($\frac{1}{4}$ inch scale), the flat pattern of a woman's chemise, and of an infant's first shirt.

Marks will be given for industry and finish.

1896. July.—(1) Cut out in paper and make up (by tacking) one leg of a child's pair of drawers (four to six years of age); and

(2) Show on calico how the side opening of the drawers is made, and how it can be strengthened with a tape or a gusset.

Marks will be given for industry and finish.

TESTS SET FOR THE STUDENTS IN TRAINING COLLEGES AND ACTING TEACHERS.

Second Year Certificate.

(Three hours allowed.)

1883. December.—(1) Cut out the front, back, and one sleeve of a frock body for a child of three years. Fix these together, and show as much of each of the following stitches as time permits, taking them in the order here given: Sewing and felling, gathering, stroking, setting-in, whipping and sewing on a frill, sewing on button, making a buttonhole, coral stitching.

(2) Prepare on stocking-web material a hole about 1 inch square, and fill in half of it with "stocking-web stitch," joining up the sides of the patch.

Reply to one of the following questions:—

1. State the size of each portion of a nightshirt (the length of the collar band, when buttoned, being 12 inches), and give the quantity of material required for a dozen such shirts.

2. What is the value of "drill" in the needlework lesson, and when would you discontinue the use of it? Give any drill you know to be effective.

Marks will be given for industry and general finish.

1884. December.—Cut out, as far as the material will allow, half the front and half the back of the upper part of a baby's nightgown; also one of the sleeves. Fix these together, and show as much of each of the following stitches as time permits:—Sewing and felling, gathering, stroking, and setting-in, stitching, whipping and setting on frill. Sew on a button, make a buttonhole, and run two tucks not less than 2 inches long.

Marks will be given for industry and general finish.

1885. December.—Cut out, as far as the material will allow, the upper part of half the front and half the back of a woman's chemise. Fix them together, and complete the exercise as far as time will permit showing the following stitches:—Hemming, sewing and felling, gathering, stroking, and setting-in; running tucks and stitching. Make a button-hole, and sew on a button.

Marks will be given for industry and general finish.

1886. December.—(1) Cut out, as far as the material will allow, the complete half the front and half the back of the upper part of a baby's nightgown, also one of the sleeves.

(2) Show each of the following stitches:—Sewing and felling, gathering, stroking, and setting-in. Sew on a button, and make a button-hole.

(3) Darn a hole (in the common method) on stocking material.

Marks will be given for industry and general finish.

1887. December.—(1) Cut out and tack together half the front and half the back of a pinafore suited to a child of two years.

(2) Darn a cross-cut on linen.

(3) On a piece of calico (6 by 6) fix a hem; on it work not less than 3 inches of plain stitching, and 3 inches of feather-stitching.

Run two tucks above the hem.

Marks will be given for industry and general finish.

1888. December.—(1) Draw a diagram ($\frac{1}{4}$-inch scale) of a woman's nightdress.

(2) Give directions for making up the garment.

(3) Set in a calico patch (3 by 3 inches).

(4) Mark your initials (two letters) in cross-stitch.

Marks will be given for industry and general finish.

1889. December.—(1) Draw a diagram of a boy's shirt, showing the various parts of the garment.

(2) Give directions for making it up.

(3) Make and stitch a band of calico; make and set on a muslin frill.

Marks will be given for industry and general finish.

1890. December.—(1) Draw a diagram of the upper half of a woman's nightdress (¼-inch scale).

(2) State the kind and quantity of material required in making up the full sized garment; also what stitches should be used.

(3) Cover a space not less than an inch square with Swiss darning.

Marks will be given for industry and general finish.

Two Hours Allowed.

1891. December.—(1) Cut out and make up in lined paper the upper part of a woman's nightdress and one sleeve (½ size).

(2) Make, in calico, a collar band (½ size) of a woman's nightdress; stitch or feather-stitch it, sew on a button and make a buttonhole.

Marks will be given for industry and general finish.

(Two Hours Allowed).

1892. December.—(1) Cut out in lined paper and make up the upper part of a boy's shirt, and one sleeve (½ size).

(2) Make and set in a gusset as for the side opening of a shirt.

Marks will be given for industry and general finish.

(Two hours allowed.)

1893. December.—Cut out, in lined paper, and make up (by tacking) half the front and half the back of a woman's nightdress (⅓-size).

On the calico supplied, show two inches of each stitch required in making up the garment (a nightdress).

Marks will be given for industry and general finish.

1894. December.—Cut out and make up, in lined paper, a child's pinafore; and

On the stocking-web material supplied, darn a hole ½ an inch square (common method), and fill in a hole, ½ an inch square, with the stocking web stitch.

Marks will be given for industry and finish.

1895. June.—Mark out on sectional paper (¼-inch scale) the different parts of a shirt suitable for a boy of 12; and

Make up the accompanying piece of calico as the lower part of a boy's shirt sleeve; stitch part of the wristband, and make a buttonhole.

Marks will be given for industry and finish.

1896. July.—Cut out in paper and make up by tacking the upper half of a woman's nightdress (half size). Make and set in one sleeve; and

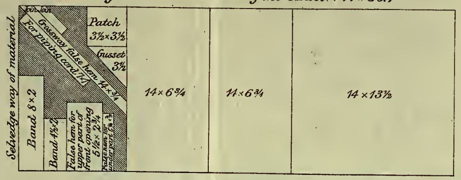
Show, on the accompanying piece of calico, 2 inches of each stitch required in making a nightdress.

Marks will be given for industry and finish.

Candidates were provided with a sheet of lined paper 27 inches by 36 ins., and a piece of calico about 6 inches by 6 inches.

A CALICO SAMPLER.

Shewing the method of cutting the calico. (14 × 36.)



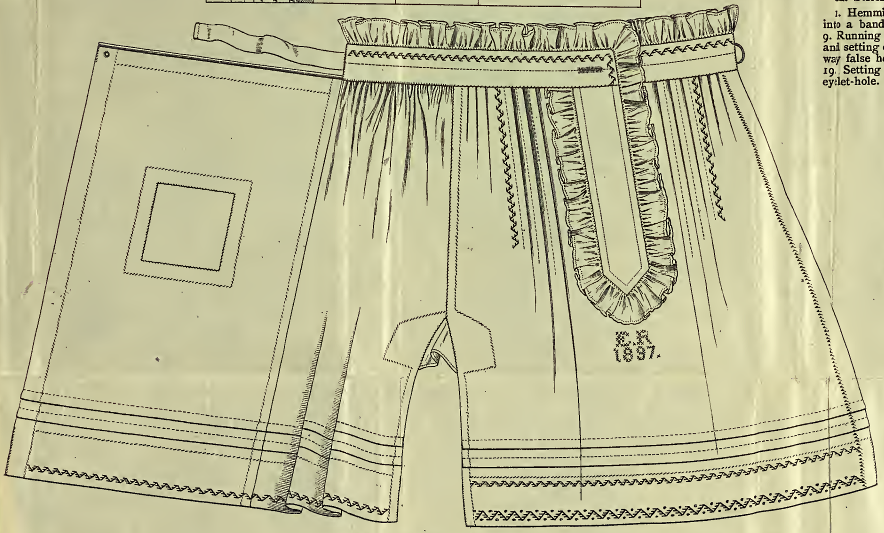


Plate No. 1.

SCHEDULE III.

PUPIL TEACHERS (GIRLS).

Fourth Year.

A sampler in calico, showing all the stitches required in the making and mending of calico garments.

I. Material necessary.—

(1) A piece of moderately coarse calico (14 in. by 36 in.) with even threads.

(2) $\frac{1}{10}$ yd. of mull muslin for frilling.

(3) Coloured cottons for the purpose of showing joins, Nos. 50 or finer, and No. 100 for frill.

(4) Crochet cotton, No. 18 or 20 for feather-stitching; flax thread may be used, if preferred.

(5) 5 inches of tape.

(6) $\frac{1}{4}$ yd. of piping cord.

(7) An unpierced linen button about as large as a threepenny-piece.

(8) The usual needlework accessories, viz., a wrapper, scissors, inch tape, needles, thimble, pins.

II. Stitches and processes which are represented. (See diagram.)

1. Hemming. 2. Sewing and felling. 3. Stitching. 4. Gathering and setting into a band. 5. Pleating. 6. Tuck-running. 7. Marking. 8. Button-holing. 9. Running and felling. 10. Feather-stitching. 11. Knotting. 12. Whipping and setting on a frill. 13. Hem-stitching. 14. Insertion of a gusset. 15. Cross-way false hem. 16. Piping. 17. Calico patch. 18. Opening as for a chemise. 19. Setting on a tape. 20. Putting on a button. 21. Making a loop and eyelet-hole.

III. Arrangement of material. (See plan).

(1) Measure 9 inches along the weft edge of the calico, and tear off a strip parallel with the selvedge. The size of this piece will be 14 by 9. It will cut bands, patch, gusset, false hems, and crossway strips. (See plan indicating the position of each.)

(2) Divide the remaining calico (14 by 27) into two equal parts, and *one* of these pieces into two again, each to be torn with the selvedge.

IV. Order of working.—(This is merely a suggestion, and may be altered as occasion may arise.)

A description of each process is given in the letterpress of the book, and should be referred to as needed. The words "right" and "left" describe the position as *facing the worker*, unless otherwise stated.

(1) Join the two pieces (14 by $6\frac{3}{4}$) by a run-and-fell seam.

(2) The large piece (14 by $13\frac{1}{2}$) should be joined to the right hand side of the work by a sew-and-fell seam, for $6\frac{1}{2}$ inches. (See diagram for position.)

(3) The sides of the opening extending from the seam must be prepared for hems ($\frac{1}{6}$ inch wide), and a gusset, cut from a square of $3\frac{1}{2}$ inches, should be inserted at the end of the seam. These narrow hems may then be hemmed from the gusset to the bottom.

(4) Hem-stitch (or ordinary hem of $\frac{1}{2}$ inch) at right hand side.

(5) Put a false hem on the cross down the left side. This must be cut from the strip 14 by 9. Fold over the top right hand corner, and cut through the diagonal crease. This will give a triangular-shaped piece of calico. Cut two strips $\frac{3}{4}$ inch in depth (see plan), and join them to make a piece sufficiently long to reach down the side. Place the right side of the strip to the right side of sampler—run $\frac{1}{6}$ inch from the raw edges, turn the strip over the wrong side, and fell in place.

(6) Hem the bottom ($1\frac{1}{4}$ inch). Pay careful attention to the four corners.

(7) Above the hem, run two tucks, $\frac{1}{4}$ inch wide.

(8) Put a calico patch, $3\frac{1}{2}$ inches square, in the middle of the width of the small piece at left hand side, and at a distance of $3\frac{1}{2}$ inches from the top.

(9) A piping cord should be put above the patch, on the raw edges extending from the run-and-fell to the false hem.

(10) An opening as for a chemise or nightgown can be shown in the centre of the right hand side piece. The whole working of the opening should be practised before the sampler is taken in hand. There are many ways of arranging the opening of garments by the addition of false hems; the following is a method often adopted, when both an upper and an under false hem are put on:—

Mark the middle of the right hand piece, measuring from the sew-and-fell seam to the hem at the side. Place the work *against the body as it would be if it were a garment to be worn*, and cut or tear a slit for the front opening, 5 inches in length, and a $\frac{1}{4}$ *inch to the right of the middle*. Make small snips at right angles to the opening and at the bottom part, which will make the hems set better. The upper false piece measures $5\frac{1}{2}$ by $2\frac{3}{4}$. Place the right side of strip to the right side of garment, and run the edges together. (The extra $\frac{1}{2}$ inch of false piece must be at the bottom of the slit). Draw two threads on the strip—the first, $\frac{5}{8}$ inch from the *raw edges* of the opening; the second, $\frac{3}{4}$ inch from the first one. Fold over the false piece so that the first drawn thread comes about $\frac{1}{6}$ inch from the fold—fix in place. Turn under the remaining calico so that the position of the second thread corresponds with the first—fix in place. Fold the calico at the bottom of the opening, so that the false piece is straight across the bottom, or ends in a point. Turn down the raw edges of the false piece so that the fold is even with the running stitches, cut away any superfluous calico at the bottom of the opening in order to make the work flat. Fell into place, being very careful that the stitches do not show through on right side. Stitch the front in the drawn threads as shown in diagram. (This may be feather-stitched if preferred, in this case the drawn threads are unnecessary).

The false hem for the under part of the opening is put on similarly to the cross-way hem. It is $5\frac{1}{4}$ by $\frac{7}{8}$.

Wrap the upper hem over the under for 1 inch, and *sew it* firmly into place on the inside—do not let the stitches show through on right side. Make the wrong side neat, by felling a piece of tape over the raw edges.

Another method of arranging an opening similar in appearance to the diagram, and perhaps more simple, is as follows:—Carry out the same directions as above from "Mark the middle," to "Make the hems set better." The false piece should be $\frac{1}{2}$ inch longer than the slit, and quite $1\frac{1}{4}$ inches wide. The false piece is put on the right hand or smaller side. Place the *right* side of false piece to the *wrong* side of the sampler, the edges being even, keeping the extra length at the bottom of the opening. Run the edges together—$\frac{1}{6}$ inch down. Make a narrow turn ($\frac{1}{4}$ inch) on the wrong side of false piece, and fold over the entire strip on to the right side of sampler, keeping the join exactly at the edge. Arrange the lower part either pointed or straight, and ornament the front by feather-stitching or stitching so as to secure the edge of the false piece. The under false hem is put on as described for the first method, but the material will need snipping at the lower part of the opening in order to make the upper piece wrap over for 1 inch. Strengthen and neaten as given above.

(11) Run three tucks, $\frac{1}{6}$ inch wide, graduating in length, on either side of opening—allow room for the frilling, so that it may not overlap the tucks.

(12) Gather and stroke the material between the sew-and-fell and run-and-fell.

(13) Put two or three pleats on either side of the tucks, leaving place for the feather-stitching.

(14) Measure the distance from the run-and-fell to the front opening, allowing the gathers to loosen out to about 3 inches, and prepare the bands for the top according to measurement. Stitch them along the centre, if preferred. Fix on the bands, and set in the gathers (leave the space necessary for the end of the frill to be put under the band). Pay special attention to the corners.

(15) Prepare the frills. Measure the distance all along the top of the band and round the front opening—allow for a little easing at the corners. Double this measurement, which will give the length needed for frill. Measure small band similarly.

Make and set on the frilling.

(16) Ornament with feather-stitching as shown in diagram. Knotting may be used anywhere at the discretion of the worker.

(17) Make the buttonhole; sew on button and tape; make loop and eyelet hole as shown.

(18) Mark initials and year.

V. Remarks.—This sampler should be carefully preserved, and have a value set upon it, as a proof of the knowledge, skill, and neatness of the worker. If the pupil-teacher should enter a Training College, it will give the Needlework Mistress a reliable guide as to the capabilities of the student.

SCHEDULE III.

PUPIL TEACHERS (GIRLS).

Fourth Year.

A sampler in flannel, showing all the stitches used in the making and mending of flannel garments.

I. Material required—

(1) ½ yard of flannel, in which the threads can be easily seen.

(2) 1½ yards of flannel binding, about ½ inch in width.

(3) A piece of calico (9 by 3).

(4) A linen button; a pearl button; 4 inches of tape.

(5) A reel of coloured cotton, No. 40 or 50.

(6) A skein of fine flax thread, silk, or Angola wool for darns.

(7) (Optional.) ½ yard of Briggs' transfer paper, and a skein of flannel silk for scalloping.

(8) The usual needlework accessories.

II. Stitches and processes that can be represented. (See diagram.)

Making.—1. Herring-boning. 2. Hemming. 3. Stitching. 4. Tuck-running. 5. Button-hole. 6. Pleating. 7. Marking. 8. Feather-stitching. 9. Putting on flannel binding. 10. A strengthening tape. 11. Formation of a placket hole. 12. Scalloping. 13. Putting on strings: (*a*) at the edge; (*b*) at a distance from the edge. 14. Sewing on a button.

Mending.—1. Darning as for a thin place.

2. Patching: (*a*) square; (*b*) triangular.

III. Arrangement of material.—The width of the flannel is of little consequence, as the division of the sampler is made irrespective of width.

(1) Measure 3½ inches on the weft edge of the material, and tear off a strip parallel with the selvedge. This piece should measure 18 by 3½, and will cut patches.

(2) Divide the remaining flannel into two equal parts (torn with the selvedge), and *one* of these pieces equally into two again.

IV. Order of working.—This is merely a suggestion, and may be altered at the option of the worker.

A description of each process is given in the letterpress of the book, and should be referred to as needed.

The words "right" and "left" describe the position as *facing the worker*.

(1) Join the two small pieces together by run-stitching and herring-boning (Method I., page 36).

(2) The large piece should be joined to the left hand side of the work by another seam. (Method II.) This seam needs run-stitching only for 7 inches, but the sides of the opening will require herring-boning to the bottom.

(3) Over-cast the raw edges at the left hand side of large piece.

(4) Put on the flannel binding at the right hand, and extend it along the top of the two small pieces. Fasten neatly at seam.

(5) Fix hems 2 inches in depth at the bottom of the sampler; the left hand piece to be turned once and herring-boned, and the right hand hemmed, ¼ inch for the first turn, and 1¾ for the second—the hemming stitches should be looser than for calico work. (Herring-boning is shown in the diagram, but an ordinary hem is often worked at the bottom of a petticoat, especially if the flannel be not thick.) Pay special attention to the corners.

(6) Run a tuck above the hem—make it 1¼ inches in depth, and leave ½ an inch between the hem and the edge of the tuck.

(7) Put a patch 3½ inches square in the middle of the second small piece, place it about 4 inches from the binding.

(8) A triangular patch may be put in the first small piece, level with the square patch.

(9) The scalloping should be worked on the hem at the left hand side.

(10) Make an opening, as for a petticoat, in the middle of the left hand portion of sampler, prepare as follows:—Mark the centre of the piece with a pin—keep the right side of the sampler facing worker, imagining that it is on a body, and required to fasten right over left. Tear a slit 6 inches in length, ¼ *inch* to the *left* of the middle. Turn a fold of 1 inch on the right hand or upper side, and another ½ inch in width on the under side (keep the folds even throughout their length). Herring bone the raw edges—snip the under fold on the wrong side at the bottom of the opening—wrap the right side well over the left, for 1 inch, and stitch across to make firm. The wrong side of the opening may be neatened, by felling a piece of binding over the raw edges.

(11) Put a pleat or two on either side of the opening. Prepare the bands, suitable in size to the raw edged material, and fell them on to the sampler to represent a waistband, paying attention to the corners. Stitch the edges of the band, if preferred.

(12) Work the darns above the patches (any shape may be chosen).

(13) Ornament the hems and the spaces between the tuck with feather-stitching.

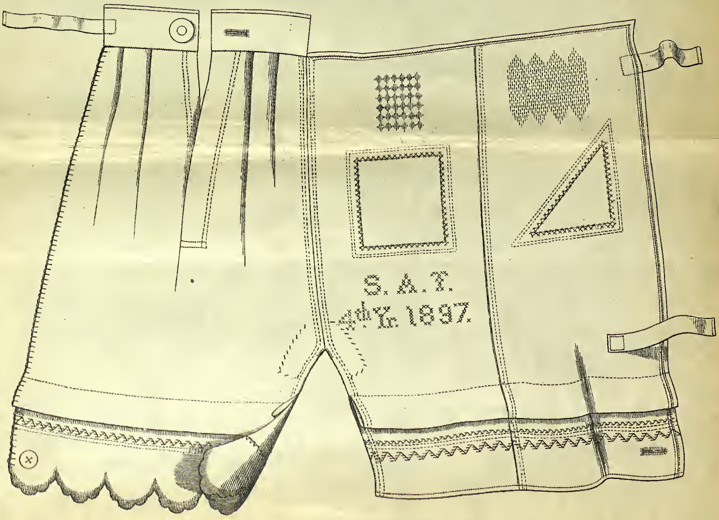
(14) Make the button-holes, one on the calico band and the other on the flannel (on the hem, as it is double material).

(15) Sew on the strings and buttons as shown in diagram.

(16) Put a strengthening tape of binding at the end of the seam.

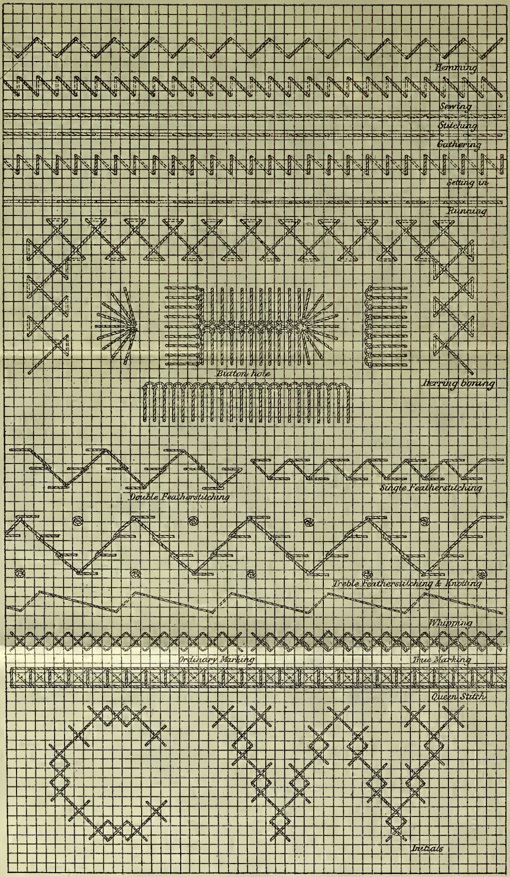
(17) Complete with the marking of name or initials, and year.

V. Remarks.—This sampler should be carefully preserved, and have a value set upon it, as a proof of the knowledge, skill, and neatness of the worker. If the pupil teacher should enter a Training College, it will give the Needlework Mistress a reliable guide as to the capabilities of the student.


S. A. T.
4th Yr. 1897.

A FLANNEL SAMPLER.

Plate No. 2.



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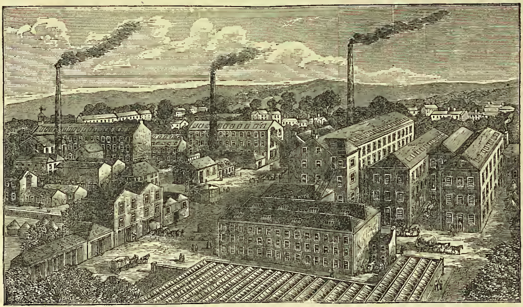

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Flannel, Saxony from 1s. 0¾d. ; Welsh from 10¾d. ; Yorkshire	from per yard	1	0¾
Flannel Binding	per piece of 36 yards	1	7
Flourishing Thread	per doz. skeins	0	9¾
Holland	from per yard	0	6½
Inch Tapes	..per doz.	0	8½
Linen, Dowlas	from per yard	0	4¾
Mending Angola, all colours	..per doz.	0	6
Mending Cotton	„	0	5½
Mull Muslin	from „	0	4¾
Needles, Crewel	.. per 100	0	7½
„ Darners	„	0	7½
„ Knitting, No. 14, 1s. 2½d. ; No. 16, 1s. 1½d. ; No. 18,	per ½ gross	1	1½
„ Sewing, all sizes	.. per 100	0	7½
Pins, Short whites		0	3¾
Print	from per yard	0	3¾
Tape, all widths	..per doz.	0	8¾
Thimbles, Infants', 1s. 8d. ; Maids', 1s. 10d. ; Women's,	per gross	2	0

Wool (16 ozs. to the lb.)—

	oz.	lb.
BERLIN.		
Black and White ..	2¼d.	2s. 9d.
Colours	2¾d.	3 4
Shaded	3d.	3 6
SUPER SCOTCH FINGERING.		
Black and White ..		1 8½
Red and Mixtures ..		2 1½
BEST SCOTCH.		
Black, White, Grey		2 9
Colours		3 4

	oz.	lb.
ANDALUSIAN.		
Black and White ..	3d.	3s. 6d.
Colours	3¼d.	3 11
ALLOA FINGERING.	2 ozs.	
Black, White, Grey	4d.	2 6½
Colours	4½d.	2 11½
PETTICOAT YARN.		
White, Grey, Drab..		3 11
Colours		4 6
VEST YARN.		
All Colours		4 3

NOTE.—When ordering Materials, please mention this book.

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